A comparative study of the relationship between the digital divide and the social capital of young people in Yazd and Kerman

Mahnaz Farahmand¹ Rahmatoleh Dadvar^{*2} Seyed Reza Javadian³ Ahmed Kalate Sadati⁴

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Abstract

The digital divide as a new phenomenon has created certain inequalities in access to the Internet and new technologies, which has caused a kind of new inequality in societies. Based on this, the main goal of this article is to know the differences and similarities between the relationship between the digital divide and social capital among the youth of Yazd and Kerman. The theoretical framework of this research is based on John VanDyck's digital divide theory, which examines technological, temporal, intellectual, social and cultural resources.

The method of conducting this research is applied in terms of objective and causal-comparative in terms of technique. The statistical population of this research is the youth of Yazd and Kerman, and the sample is also based on the Cochran formula, 385 youths from Yazd city and 385 youths from Kerman city. The required information has been collected and analyzed using two methods of scanning library resources and digital gap questionnaires developed by the researcher and the social capital of Onyx and Bolen. The collected data were analyzed using Pearson's correlation coefficient, analysis of variance and structural equation model using SPSS and Amos software.

Statistical findings, while showing a significant difference in the digital divide in the two cities of Yazd and Kerman, were indicative of the fact that the correlation between the two indicators of the digital divide and social capital in the two cities is

^{1.} Associate Professor, Department of Social Sciences, Yazd University, Yazd, Iran. Email: mahnazfarahmand6@yhoo.com

^{2*} Sociology PhD student, Yazd University, Yazd, Iran and Assistant Professor, Department of Social Sciences, Baft Islamic Azad University, Baft, Iran. (Corresponding author) Email: rahmatolahdadvar313@gmail.com

^{3.} Assistant Professor, Department of Social Sciences, Yazd University, Yazd, Iran Email: javadianreza212@gmail.com

^{3.} Assistant Professor, Department of Social Sciences, Yazd University, Yazd, Iran. Email: ahmadkalatesadati2@gmail.com

significant. That is, there is a significant relationship between the digital divide and social capital, and considering the negative correlation coefficient, it is clear that with the increase in the digital divide, social capital decreases in two cities. The general results indicate a significant difference in the digital divide among the citizens of Yazd and Kerman based on the social capital variable.

Keywords: digital divide, social capital, youth of Kerman, youth of Yazd.

1. Introduction

In the new era, due to the penetration of the Internet, the society has changed from its traditional state and towards becoming an information society. The new needs in the information society have caused the form and level of literacy to go out of its traditional state, and as a result, contrary to its simple definition in the traditional society, it no longer means only the ability to read and write, but has a broader concept and pursues higher goals. In fact, literacy in the information society is the main prerequisite for intellectual growth, information and the ability to conduct research to produce new knowledge and technologies. On the other hand, the digital revolution has led to the rapid development of technology and the production of products that can increase the access, management and circulation of knowledge and information. As people age, innovative technology solutions play an essential role in enriching the quality of life, health and independence of people.

Information and communication technologies (ICT), products that enable the storage, retrieval, manipulation, transmission or reception of information in digital form, can improve access to goods and services. Creating and maintaining a safe and secure independent living environment; facilitating selfmanagement of age-related challenges; and activates communication and social participation. Despite the prospect of improving people's daily lives, the lack of access to information and communication technologies has led to significant inequalities in who can access, use and benefit from these interventions, leading to the gap. It is called digital (Casado-Muñoz et al., 2015: 38). When the digital divide was first coined as a term in the 1990s, it referred to the gap between those who had access to computers and the Internet and those who did not. Minorities and low-income Americans were absent from cyberspace, while white and wealthier Americans were constantly strengthened in this area (Walker, 2012). Digital divide is a term used to express global distribution inequalities in terms of access to information and communication technology, including telephone, radio, television, internet, satellite and any device that falls under the concept of information and communication technology, and beyond that ability It is a useful use of available information.

In other words, the digital divide is the existing inequalities between the country and different peoples of the world, and contrary to the idea that existed in the 1990s, new research shows that inequality in the possession and use of information, in addition to access to technical infrastructure, is closely linked with cultural capital and Digitally literate. When those people can engage with Internet technology, a wide range of personal, family, and social benefits become possible. In this regard, focusing on the challenges that people in developing countries face to access the Internet, determines the extent of the digital divide in societies (Antonio & Tuffley, 2014: 673).

Therefore, the digital divide is the difference in people's ability to communicate according to their place of residence, standard of living and level of education. This difference can exist between different regions of a country or different classes of a society, and between industrialized countries and other countries (which is called the global digital divide). In both cases, this gap or difference depends on the economic and social status of both sides of the gap (Soltanifar, 2018: 5). Also, more than two decades ago, glaring disparities in Internet access raised concerns that new technology might exacerbate rather than improve inequality, leading analysts to focus on what has been called the online-offline digital divide (Kularsk & Moller, 2012: 1).

Definitions that distinguish ICT access based on "haves" and "have-nots" have evolved, turning the digital divide into a complex phenomenon that can be understood in countless ways (Van Dijk, 2017: 199). Based on this, the digital divide is a term used to express global distribution inequalities in terms of access to information and communication technology. In other words, to some extent, the digital divide is a sign of the threat of powerful powers that divide the world into unequal parts in terms of access to information in the 21st century. In other words, the digital divide is the existing inequalities between

different countries of the world, which is caused by how they use information and communication technology in the direction of economic and social development. Also, the digital divide consists of a skills gap and a physical access gap to information technology (IT), and these two gaps often contribute to each other in circular causality. Without access to technology, it is difficult to develop technical skills, and access to technology without having the necessary skills to use it is redundant (Antonio & Tuffley, 2014: 674).

Research on the digital divide has primarily focused on access to information and communication technologies (Anderson, Bickson, Love, and Mitchell 1995, Griek 2004, Katz and Rice 2002, Norris 2001, Schoffer and Hastings 2002). Demographic communication and Internet use is one of the major research questions in the field of digital divide. Phenomena of this kind can be called "digital divide of the first level" (Dewan & Riggins, 2005). In another definition, the primary digital divide or the first level has been divided into two types of access and use. The definition of access states: The digital divide is the difference between those who have access to the Internet and information and communication technology and those who do not. And about the application: the digital divide is defined as the difference between Internet users and non-users (Kado Institute, 2004). In the "digital divide of the second level" the question is answered about the ability and different skills in using the Internet and using the benefits of e-government (DiMaggio, Hargittai, Neuman, Robinson, 2001; Harjitai, 2002, 2003 cited in Donat, 2009).

In the definition of Kado Institute, the second level digital divide refers to the difference between users. In this definition, it examines the difference between productive users and consumers of Internet information content, as well as the difference between powerful users and passive users. And the third dimension of the digital divide, which has been less researched, is the adoption of new technology, that is, the attitude towards the Internet. Although this attitude has an important impact on learning how to use new media (Brandtweiner, 2009: 38). In many ways, the digital divide has been bridged through improved Internet access and technology/processes that improve disparities in health outcomes and the health care system. Therefore, it is necessary to continue to use new technology in health care to improve outcomes and be careful to ensure that these outcomes promote equity among different populations (Saeed and Masters, 2021: 1).

Sociologists and social psychologists consider several factors to be effective in the digital divide. In this context, Castells (2001) mentions factors such as income, education, ethnicity, age, family base, and ability, and Wilson (2006) mentions the variables of gender, geographic location, income, education, occupation, and ethnicity. Van Dijk (2005) argues that the individual's status (age, gender, ethnicity, intelligence, personality, health and ability) and initial access to temporal, material, mental, social and cultural capital are considered important in this regard (Zamani and Afshar Kohn, 2009: 84). Coleman defines social capital as follows: "The set of resources that exist in the nature of family relationships and in the social organization of society and are useful for the cognitive and social development of children and young people. These resources are different for different people and can be an important advantage for children and teenagers in developing their human capital (Kolman, 1998:302). Putnam says about social capital: "This concept refers to the connections between people, social networks and the norms of mutuality and trustworthiness that arise from them" (Field, 2003; Majdi and Lehsaizadeh, 2015).

2. Review of Literature

Soltanifar (2014), in a research entitled investigating the digital gap in different parts of the country and providing a suitable model to solve it, achieves these results. In this research, by determining the amount of digital divide between the provinces of the country, it was found that Tehran province has the best situation in terms of digital benefit and Sistan and Baluchistan province has the worst situation among the provinces, and as they move away from the center, the digital gap increases and the provinces The border and western regions of the country have a higher digital divide than other provinces.

Arbatani and Kazemi (2013), in their research titled "Determinants of the Digital Divide" concluded that economic and infrastructural factors directly and cultural factors influence the digital divide through the mediating role of

motivational access. In the comparison of different factors, the role of the cultural factor is more important than the economic and infrastructural factors.

Kazemi (2013), in a research entitled, the effect of income inequality on the global digital divide, investigates the effect of income inequality on the global digital divide during the period of 1994-2012. According to the results, there is a positive relationship between digital divide and human capital, trade freedom, per capita income, percentage of rural population, population growth and delay in internet access. The results of the sensitivity analysis of the model also show that the results are not sensitive to the change of the dependent variable, the time period and the alternative variable of income inequality.

Ghasemi and Adlipour (2012), in a research entitled Sociological Analysis of the Digital Divide among Students of Isfahan University, concluded that gender and income are not considered as influencing factors in the digital divide among students. Increasing the use of computers and the Internet leads to the reduction of the digital divide. This is also true for online participation. In fact, the more people participate online through virtual social networks, email, chat and blogs; The digital divide is decreasing. Also, the findings of the research indicate the effect of anxiety caused by using the computer in increasing the digital divide. In addition, the amount of anxiety caused by working with computers is more among women than among men.

Keith Roy (2017), in a research entitled Digital divide in the generation of computer gamers: self-efficacy, control and use of information and communication technology among teenagers; It emphasizes on demographic social factors such as age, gender and education as the most important influencing factors. This research uses Bandura's theory of social cognition and self-efficacy and the structure of router control method as a theoretical framework. The results show that the computerized way of controlling and using information and communication technology best explains the digital divide.

Massimo Ragnedda and Glenn & Muschert (2015), in a research titled Max Weber and Digital Divide Studies, believe that although the great sociologist Max Weber has written less about media dynamics, Weber's perspective provides potentially powerful analyzes of related issues. It provides media that spans the digital divide. In particular, the contribution of Weber's school of thought for this field emphasizes non-economic and non-technical factors for the study of digital inequalities, which is mainly based on the importance of dignity and legitimacy, group conditions and political relations as areas of interest.

Cho O'Shea (2011), in his research, showed that education is effective in creating a positive attitude towards the Internet and computers. People with a higher level of education have a more positive attitude towards computers, and the attitude towards the Internet plays an important role in adopting and learning how to use information and communication technology.

The digital revolution has led to innovative solutions and technologies that can support the well-being, independence and health of citizens. However, the concept of the digital divide presents significant inequalities in terms of who has access to and benefits from the digital landscape. Today, to better understand social and structural inequalities, the digital divide is a reliable strategy (Feng et al., 2019: 1). Specifically, digital divide research is an interdisciplinary activity that began around 2000 and mainly operates in communication sciences, sociology, psychology, economics, and educational sciences. Communication science focuses on access and use of digital media, and sociology emphasizes social inequality in terms of resources, types of capital, and participation in society. Psychology deals with attitudes and motivations for using digital media and examines phenomena such as computer anxiety and technophobia. Also, economics highlights the diffusion of relevant innovations, and finally, pedagogy emphasizes information or digital literacy (Van Dijk, 2017: 2).

Although age is focused as a key factor in the digital divide, many analyzes show that education, income, gender, and generational status also influence digital inequality among individuals (Feng et al., 2019: 1). Several factors have also been reported to contribute to the digital divide. Among them are poverty, low literacy, lack of interest or motivation to use technology and lack of access to technology. These issues exist in all countries and make the digital divide a global issue. Lack of access to technology occurs due to the cost of technology, insufficient broadband access, poor access for all, and the use of lower

performance devices such as computers or tablets. Recent studies show a decreasing trend in the digital divide among societies (Robotham et al., 2016: 309).

According to John VanDyck, who has a large part of his research in the field of information and communication technologies and the information society, not only material resources such as income and possession of technological tools; but also other resources such as time resources (having time to use digital media), intellectual resources (sufficient intelligence), social resources (people and networks that can be helped), and cultural resources (individual base and culture that make people encourage the use of technology) are also effective in the inequality of access to digital technologies. These inequalities can be divided into two categories: individual inequalities and situational inequalities. Individual inequalities include age, sex, race, intelligence, personality and health status, and situational inequalities include type of occupation, level of education, living in countries with high or low prosperity, and the role of the individual in the family as a parent, child, husband and wife. takes over The type of media is another factor that affects the potential reach of a media. Of course, access to a medium such as television is different from access to a medium such as a computer (Van Dijk, 2006: 187).

The digital divide is often conceptualized as the gap between those who have access to critical information and communication technology (ICT) resources and those who do not. It also describes the digital divide as a statement of inequality in online society, including access between developed and developing countries, rich and poor, and men and women in those countries, and finally the digital divide as a democratic divide between those who use digital resources. It is described what they use and don't use for participation, mobilization and participation in public life (Antonio & Tuffley, 2014: 674).

In general, access to digital resources is a multifaceted phenomenon that consists of four factors; Psychological access, access to materials and infrastructure, access to skills, and access to use are formed which are necessary to regulate access. What began as a simple concept of the existence of "haves" and "have-nots" in the digital world has evolved into a more

detailed conceptual framework. Psychological access is where the user has little interest in access or has a negative attitude towards the computer. Access to materials is related to lack of physical infrastructure. Access to skill is where a person lacks the digital literacy skills to be effective online and access to use is where a person does not have the time or opportunity to access digital information regardless of their skill level (DiMaggio et al., 2004: 356).).

The meaning of psychological or motivational access is the willingness of people to use computers and the Internet. In fact, some people have no interest and attraction towards it more than they have the problem of not having computers and internet. Individuals with motivational access problems present issues such as lack of need, interest, ability to purchase, ability to use, and time (Van Dijk, 2006: 317). A gap in motivational access can be used in several situations: when a person suffers from problems such as fear and anxiety caused by computers, when a person has used computers and the Internet in the past, but no longer has the desire to do so, and when that the person faces a lack of financial and intellectual resources (Van Dijk, 2006: 180).

Material or physical accessibility is the first dimension of the digital divide that was initially considered. A huge part of the research related to the digital divide has been done in this area. Physical access is defined as a person's access to computers and the Internet. Demographic indicators such as income, education, age, gender and race are effective in this type of access (Van Dijk, 2006: 224). When a person does not use computers and the Internet despite motivational and material access, the issue of skill access is raised. Van Dijk suggests three types of skills in this field, which include; Operational skills are information skills and strategic skills. Operational skills are a person's ability to use software and hardware. Information skills are divided into two parts: general information skills and basic information skills. General information skills refer to a person's ability to work with normal computer programs. Basic information skills refer to a person's ability to find, select, process and evaluate information to achieve a specific goal. Strategic skills express a person's ability to use computers and the Internet to achieve a better position in society (Van Dijk, 2017: 167).

3. Methodology

The method used in this research is practical in terms of objective and causal-comparative in terms of technique. The statistical population includes all the youth of the cities of Kerman and Yazd, due to the size of the statistical population, based on the Morgan table and the Cochran formula, a proportional sample was selected based on the cluster sampling method, and the sample size is approximately 385 people, and a sample of 385 people from the population of Yazd and A sample of 385 people from Kerman city was selected and questioned. The required information has been collected and analyzed using two methods of scanning library resources and digital gap questionnaires developed by the researcher and the social capital of Onyx and Bolen.

- The digital gap questionnaire which has 83 items, which are divided into 13 items related to experience and access to the Internet and computers and Internet speed. 24 items related to internet and computer skills; 34 items are related to the amount of use of computers and the Internet and computers and 12 items are related to the attitude to the Internet.

In order to measure the digital divide, which includes the access and use skills, the amount of use of the Internet and computers, and the attitude towards the Internet, different questionnaires related to each of the variables were used using different domestic and foreign research articles as necessary and in a consolidated manner. Is.

Onyx and Bolen's social capital questionnaire has 36 questions and 8 components, the components of which are participation in the local community with 7 items, social agency or foresight and progress in the social field with 7 items, feeling of security and trust with 5 items, interactions with Neighbors with 5 items, interactions with family and friends with 3 items, tolerance of diversity with 2 items, value of life with 2 items and finally work interactions with 3 items are indexed.

The validity of the digital gap questionnaire made by the researcher is determined based on face validity, content and exploratory and confirmatory factor analysis. Their reliability is also calculated based on the halving method and using Cronbach's alpha coefficient above 0.7, and the social capital questionnaire is standardized. Finally, the collected data were analyzed using

Pearson's correlation coefficient, analysis of variance and structural equation model using SPSS and Amos software.

4. Findings

First, before examining the research hypotheses, the normality of the research variables should be checked by the one-sample Kolmogorov-Smirnov test.

H0: The investigated variable does not have a normal distribution.

| Table 1. Kolmogorov-Smirnov test is an example for research variable | | | | | | | | | | |
|--|----------------|-----------------|----------------|-------------|--|--|--|--|--|--|
| | variable | The sample size | test statistic | significant | | | | | | |
| | Digital gap | 385 | 1.746 | 0.001 | | | | | | |
| | Social capital | 385 | 1.326 | 0.001 | | | | | | |

Based on the results of the one-sample Kolmogorov-Smirnov test table, the assumption of normality for the variables of digital divide and social capital is confirmed (P < 0.05). That is, with 0.95 percent confidence (at a significance level of 0.05), the assumption of normality is confirmed.

Because the assumption of normality was accepted for the two main research variables, Pearson's linear correlation test is used to check the research assumptions.

1- There is a relationship between the digital divide and social capital among the citizens of Kerman.

| Table 2 | Table 2. correlation coefficient between digital divide and social capital | | | | | | | | | | |
|-------------|--|------------|------------|---------------|----------------------|--|--|--|--|--|--|
| variable | Soci | al capital | | There is a | Type of | | | | | | |
| | Pearson | | connection | communication | | | | | | | |
| Digital gap | (r) correlation -0.648 | °0.000** | N 385 | Yes | Reverse and negative | | | | | | |

Table 2. correlation coefficient between digital divide and social capital

According to table (2), because the value of the significance level of the test (0.001) is less than 0.01, then the null hypothesis is rejected at the error level of one percent. Therefore, the degree of correlation between the two indices of digital divide and social capital is significant. That is, there is a significant relationship between the digital divide and social capital. According to the sign of the correlation coefficient (value -0.648), it is clear that the relationship between these two indicators is negative and significant. That is, as the digital divide increases, social capital decreases.

2- There is a relationship between the digital divide and social capital among the citizens of Yazd.

| Table | 3. correlation coel | ficient between | digital divide | and social ca | ipital |
|-------------|---------------------------|---------------------|----------------|---------------|----------------------|
| variable | | Social capital | There is a | Type of | |
| | Pe | Pearson correlation | | | communication |
| Digital gap | (r) correlation -0.691 | p <0.000** | N 385 | Yes | Reverse and negative |

According to table (3), because the value of the significance level of the test (0.001) is less than 0.01, then the null hypothesis is rejected at the error level of one percent. Therefore, the degree of correlation between the two indices of digital divide and social capital is significant. That is, there is a significant relationship between the digital divide and social capital. According to the sign of the correlation coefficient (value -0.691), it is clear that the relationship between these two indicators is negative and significant. That is, as the digital divide increases, social capital decreases.

3- There is a relationship between the indicators of the digital divide and social capital among the citizens of Kerman.

| Indicators of the digital divide | Components | Social capital |
|---|---------------------|----------------|
| Internet and commuter coords | Pearson correlation | -0.564 |
| Internet and computer access | Significance level | 0.001 |
| | Pearson correlation | -0.543 |
| Computer and internet skills | Significance level | 0.001 |
| | Pearson correlation | -0.569 |
| Attitude towards the Internet | Significance level | 0.001 |
| | Pearson correlation | -0.708 |
| The amount of internet and computer use | Significance level | 0.001 |

Table 4. correlation coefficient between digital divide indicators and social capital

According to table (4), because the value of the significance level of the test is less than 0.01 for all indicators of the digital gap between generations, then the assumption of the existence of correlation between the indicators of the digital gap and social capital cannot be rejected at the error level of one percent. That is, there is a significant relationship between the indicators of the digital divide and social capital among the citizens of Kerman. According to the sign of the correlation coefficients, it can be seen that the relationship between all these components is negative and significant. Also, by comparing the values of correlation coefficients, it is clear that among the indicators of the digital divide, the index of the amount of internet and computer usage has the highest correlation value (-0.708) and the skill index of using computers and the internet has the lowest correlation value (-0.543). with social health.

4- There is a relationship between the indicators of the digital divide and social capital among the citizens of Yazd.

| Indicators of the digital divide | Components | Social capital |
|---|---------------------|----------------|
| Internet and commuter ecces | Pearson correlation | -0.494 |
| Internet and computer access | Significance level | 0.001 |
| | Pearson correlation | -0.583 |
| Computer and internet skills | Significance level | 0.001 |
| Attitude towards the Internet | Pearson correlation | -0.669 |
| Attitude towards the Internet | Significance level | 0.001 |
| | Pearson correlation | -0.718 |
| The amount of internet and computer use | Significance level | 0.001 |

Table 5. correlation coefficient between digital divide indicators and social capital

According to table (5), because the value of the significance level of the test is less than 0.01 for all indicators of the digital gap between generations, then the assumption of the existence of correlation between the indicators of the digital gap and social capital cannot be rejected at the error level of one percent. That is, there is a significant relationship between the indicators of the digital divide and social capital among the citizens of Kerman.

According to the sign of the correlation coefficients, it can be seen that the relationship between all these components is negative and significant. Also, by comparing the values of correlation coefficients, it is clear that among the indicators of the digital divide, the index of the amount of use of the Internet and computer has the highest correlation value (-0.718) and the index of access to the Internet and computer has the lowest correlation value (-0.494) with It has social health.

| capital in Yazd | | | | | | | | |
|------------------|---------------------|---------------------------------------|--------------------|-----------------|---|-------------------|----------------|--|
| | | Internet and computer access | Compute: skills | the Internet | The amount of internet and computer use | Social capital | Digital divide | |
| Internet and | Pearson correlation | 1 | -0.703 | -0.665 | -0.586 | -0.624 | -0.854 | |
| computer access | Significance level | | .000 | .000 | .000 | .000 | .000 | |
| computer access | Ν | 385 | 385 | 385 | 385 | 385 | 385 | |
| | Pearson correlation | -0.703 | 1 | -0.706 | -0.598 | -0.520 | -0.844 | |
| Computer skills | Significance level | .000 | | .000 | .000 | .000 | .000 | |
| | Ν | 385 | 385 | 385 | 385 | 385 | 385 | |
| Attitude towards | Pearson correlation | -0.665 | -0.706 | 1 | -0.674 | -0.522 | -0.863 | |
| the Internet | Significance level | .000 | .000 | | .000 | .000 | .000 | |
| the Internet | Ν | 385 | 385 | 385 | 385 | 385 | 385 | |
| The amount of | Pearson correlation | -0.586 | -0.598 | -0.674 | 1 | -0.504 | -0.846 | |
| internet and | Significance level | .000 | .000 | .000 | | .000 | .000 | |
| computer use | Ν | 385 | 385 | 385 | 385 | 385 | 385 | |
| | Pearson correlation | -0.624 | -0.520 | -0.522 | -0.504 | 1 | -0.637 | |
| Social capital | Significance level | .000 | .000 | .000 | .000 | | .000 | |
| | N | 385 | 385 | 385 | 385 | 385 | 385 | |
| | Pearson correlation | -0.854 | -0.844 | -0.863 | -0.846 | -0.637 | 1 | |
| Digital divide | Significance level | .000 | .000 | .000 | .000 | .000 | | |
| Ū | N | 385 | 385 | 385 | 385 | 385 | 385 | |
| | **. Correlatio | on is signif | icant at th | ne 0.01 le | vel (2-tail | ed). | | |

Table 6. Pearson correlation coefficient between digital divide components and social capital in Yazd

Table 7. Pearson correlation coefficient between the components of the digital divide with social capital in Kerman

| | | Internet and computer access | Compute: skills | the Internet | of internet and | Social capital | Digital divide |
|------------------|---------------------|---------------------------------------|--------------------|-----------------|-----------------------|-------------------|----------------|
| Internet and | Pearson correlation | 1 | -0.698 | -0.670 | -0.587 | -0.640 | -0.754 |
| computer access | Significance level | | .000 | .000 | .000 | .000 | .000 |
| computer access | Ν | 385 | 385 | 385 | 385 | 385 | 385 |
| | Pearson correlation | -0.698 | 1 | -0.714 | -0.621 | -0.514 | -0.811 |
| Computer skills | Significance level | .000 | | .000 | .000 | .000 | .000 |
| | Ν | 385 | 385 | 385 | 385 | 385 | 385 |
| Attitude towards | Pearson correlation | -0.670 | -0.714 | 1 | -0.645 | -0.543 | -0.872 |
| the Internet | Significance level | .000 | .000 | | .000 | .000 | .000 |
| the internet | Ν | 385 | 385 | 385 | 385 | 385 | 385 |
| The amount of | Pearson correlation | -0.587 | -0.621 | -0.645 | 1 | -0.498 | -0.864 |
| internet and | Significance level | .000 | .000 | .000 | | .000 | .000 |
| computer use | Ν | 385 | 385 | 385 | 385 | 385 | 385 |
| | Pearson correlation | -0.640 | -0.513 | -0.533 | -0.512 | 1 | -0.623 |
| Social capital | Significance level | .000 | .000 | .000 | .000 | | .000 |
| | N | 385 | 385 | 385 | 385 | 385 | 385 |

| Digital divide | Pearson correlation Significance level | -0.754 .000 | -0.811 .000 | -0.872 .000 | -0.864 .000 | -0.623 .000 | 1 | |
|--|---|---------------------------------------|---------------------------------|-------------------|---------------------------|-------------------------|--------------------------------------|--|
| U | N | 385 | 385 | 385 | 385 | 385 | 385 | |
| | **. Correlation | n is signif | ficant at th | ne 0.01 le | vel (2-taile | ed). | | |
| Table 8. independent T-test results of digital divide indicators by place of residence mean social | | | | | | | | |
| | • | | 0 | | | • • | | |
| Table 8. inde Variable | • | | digital d ligital div | | | • • | <u>esidence</u> social capital | |
| | Indicator | rs of the d | 0 | ide | 1 | nean | social | |
| Variable | Indicator | rs of the c and comp | ligital div | ide ess | ¹ Yazd | nean Kerman | social capital | |
| | Indicator Internet Comput | rs of the d and comp ter and in | ligital div puter acce | ide ess lls | 1 Yazd 3.695 | nean Kerman 3.685 | social capital .001 | |

The results of the T test with two independent samples are shown in Table 8. The results show a significant difference between the citizens of Yazdi and Kermani in the indicators of the digital divide. According to the results, the average access to the internet and computer and the amount of internet and computer use among the citizens of Yazdi and the average skill of using the computer and the internet and the attitude towards the internet are higher among the citizens of Kermani.

 Table 9. The results of the t-test related to the comparison of the digital divide based on social capital in the cities of Kerman and Yazd.

| Statistical indicators | Test | Levene | | Test t | |
|---------------------------|--------|-----------------------|-------|--------------------|-----------------------|
| City | F | Significance level | Т | Degrees of freedom | Significance level |
| Kerman Yazd | 21.005 | 0.001 | 3.586 | 372.163 | 0.009 |

The results from Table 8 show that the calculated t (3.586) is less than 0.05 with a significance level of 0.009 and a degree of freedom of 372.163; Therefore, the null hypothesis is rejected and the research hypothesis is confirmed. Therefore, with 0.95 confidence, it can be claimed that there is a significant difference between the digital divide of Kermani and Yazdi citizens based on their social capital.

5. Conclusion

The concept of digital divide is usually defined as the gap between people who have or do not have access to forms of information and communication technology. These problems are primarily computers and the Internet. Sometimes mobile phones, especially smartphones (smartphones), and other digital hardware and software are also included. The digital divide will cause the economic, cultural, social, and political levels of societies to distance themselves from each other, and as a result, the young generation will pay attention to the countries with technology. One of the consequences of this will be the predominance of their cultural products to weaken beliefs, traditions, and cultures and the emergence of a kind of cultural exploitation, identity crisis, despair, and depression in the society. This will fuel other social problems.

In this study, measuring the relationship between the digital divide and its indicators with the variable of social capital in the investigated cities (Yazd and Kerman), showed a significant and negative (inverse) relationship. It means that in the studied society, the lower the social capital of the people, the more the digital gap prevailed in that society.

In this research, the city of residence variable was investigated both in relation to gender and in relation to the digital divide. The reported values indicate the different conditions of this variable in the field of digital gap. The data collected from the investigated sample in Yazd and Kerman showed that these two cities have a significant difference in terms of digital divide based on social capital variable. The gender variable showed that male students, compared to female students, have access to more diverse places to use computers and the Internet. For example, men go to Cafe Net more than women. This can be caused by the male space of net cafes and the limitation of women to attend male spaces. On the other hand, male students use computers and internet more than females at work, which is due to the higher rate of male employment. Ghasemi and Adlipour (2012), in a research titled sociological analysis of the digital divide situation among Isfahan University students, also paid attention to this issue.

In the study of the relationship between the amount of computer and internet use and the digital divide, the reported values indicate the influence of this variable on the digital divide. So that the increase in the amount of use leads to the reduction of the digital divide. This is also true for online participation. In fact, the more people participate online through virtual social networks, e-mail, chat, and blogs; The digital divide is decreasing. This is probably due to the encouraging nature of these activities to participate and use more.

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