"For us, Alibaba was just a story": despite the power of habit, older people are gradually adopting the digital discourse

By Shlomit Manor[1]* & Arie Herscovici[2]

Abstract

Information technology (IT) can help older people continue to live independently and actively for many years, yet many of them express fear of it, perceive it as a threat, and find it difficult to navigate the digital arena and enjoy the benefits of IT. The purpose of this study is to examine the technology discourse of older people in Israel, and what it reflects. In addition, the study seeks to understand the extent to which IT is present in their lives, how they experience it, and the changes it brought to their lives.

To that end, we interviewed 40 older people aged 65–93 who were attending day centers. The findings, which were examined in light of the continuity theory, reveal different levels of resistance to IT, which reflect the full spectrum, from rejection to acceptance. Moreover, the continuity strategy and adherence to familiar patterns do not necessarily prevent adaptation to change. The findings reveal an ambivalent technology discourse, incoherent, and laden with internal contradictions.

[1]*Shlomit Manor*, Department of Sociology, Western Galilee College, Akko, Israel
[2]*Arie Herscovici*, Department of Political Science, Western Galilee College, Akko, Israel

Introduction

Smart cities, smart villages, smart living compounds, smart homes, and smart phones have all become household terms in recent years. However, for these environments to be worthy of the title "smart," we must examine the extent to which they are adapted to and appropriate for the needs of those who use them (Angelidou 2015). One group that can especially benefit from using information technology (IT) is older people. Technology can help older persons adopt and maintain a healthy lifestyle, improve their quality of life, remain independent and keep living at home longer, express themselves, take an active part in community life, expand their social circles, stay in contact with family members, help cope with loneliness, and so on (Chen & Chan 2011; Gonzalez et al. 2012; Mitzner et al. 2010; Niehaves & Plattfaut 2014; Russell 2011; Siriaraya et al. 2014). The use of technology strengthens the feeling of self-efficacy and contributes to a sense of mental and physical well-being.

Nevertheless, despite the great benefit that older persons may derive from using IT, many researchers have reported finding patterns of avoidance and blocks that limit its use (Niehaves & Plattfaut 2014). Findings indicate that older persons tend not to use computers and the Internet since they fail to see the advantage of using online services, are not motivated to learn, and most of them are not familiar with the digital jargon. They perceive computers and the Internet as useless and sometimes even as dangerous and as a threat to their freedom and lifestyle (Hakkarainen 2012). Yet, the more positively older people evaluate the benefits of IT, the more likely it is that they will adopt it (Golant 2017). Sometimes the block is due to economic reasons, for instance, the high cost of computers or smart phones. Other times the limitations are physical or due to a decline in cognitive abilities (Seifert & Schelling 2018).

Yet, the older population is not a homogeneous group. It is characterized by great variability in terms of its attitude to IT and the extent to which older people are skilled and ultimately use IT.

The data from a survey conducted in Israel revealed that only about 60% of those aged 65 and above use a computer or the Internet, and only about a quarter of all senior citizens actively participate in social networks, use government online services, or make payments or appointments via the Internet (26%). The proportion of older adults who shop online is even lower (15%) (CBS 2019).

The information society, as Fisher (2011) argues, produces a discourse about IT and, at the same time, the technological discourse shapes society. Analyzing the discourse emerging in the information society can shed light on the social relationships that are forged by it. According to this concept, the technology discourse serves as a prism through which practices and social relations can be examined.

This study seeks to contribute to the literature on technology discourse analysis, but since the discourse does not take place in a vacuum, it should be examined in its social context. We aspire to shift the discussion from the macro level to the micro level and focus specifically on the older population in Israel. This study, therefore, examines what the technology discourse of older people in Israel reflects, in an attempt to understand the extent to which IT is present in their lives, how they experience it and talk about it, and what the central narrative that emerges from the digital discourse is. The questions derived from this purpose are as follows: "What feelings do older people express toward IT?," "what metaphors do they use in their attempt to understand the digital world?," and, "to what extent do older people perceive IT as essential for them?"

The theoretical framework within which we will analyze the older people's digital discourse is the continuity theory, as presented by Atchley (1989). This theory, which was originally written in the context of gerontology, claims that as people age, they tend to preserve familiar patterns from their past. Familiar strategies that they learned and developed earlier in their lives can help them wrestle with changes in later life. Continuity gives a sense of control. Although the continuity theory is concerned with changes and losses typical of late adulthood and old age, we use it here in the context of changes in the older adults' lives that were induced by IT. The digital discourse has not yet been examined through the prism of continuity theory. Thus, this study will contribute a new perspective to the understanding of the older persons' digital discourse.

Obstacles to the Adoption of IT by Older Persons

The digital environment has become an inseparable part of our daily life. Many services, both private and public, have moved online in recent years (Chadwick & May 2003). However, due to a lack of accessibility to infrastructures or a lack of digital skills by certain groups in the population, IT might exclude various social groups, thus creating a "digital divide" and "digital exclusion" (Robinson et al. 2015). One of these groups is that of the older persons. IT can help them enjoy healthy, autonomous, and socially active lives (Siegrist & Wahrendorf 2009). However, many older people, who lack digital literacy, fail to derive the benefits that IT can offer. They refrain from participating in communal life, and suffer from low self-efficacy (Friemel 2016; Goldschmidt 2017).

The literature proposes several possible explanations for the obstacles facing older persons when it comes to using IT and online services. One is the perception of the Internet as useless since the information available on it is perceived as irrelevant (Friemel 2016; Hakkarainen 2012). Another reason is related to the lack of skills and knowledge required in order to use the Internet. Lack of technological devices with access to the Internet (tablets and computers) also sometimes prevents the use of online services.

Lee et al. (2011) identified four components that limit Internet usage among older individuals: lack of inner motivation and self-efficacy, functionality limitations such as memory deterioration, technical structural limitations such as price, and personal limitations such as lack of support. Furthermore, smart phone usage also declines with age for a variety of reasons, ranging from a lack of interest or a lack of awareness to the advantages such devices offer, to a lack of skills and economic constraints. A study conducted in Finland found that older people perceive computers and the Internet as useless and even as dangerous and threatening to their freedom, health, lifestyle, and personal safety (Hakkarainen 2012). They feel they have other tools that they are already familiar with and prefer to use them rather than using a new and unfamiliar tool, much like the claim underlying the continuity theory, as presented below.

Continuity Theory and the Rejection of Digital Technology

The underlying premise of the continuity theory is that people tend to maintain familiar patterns from the past, in an attempt to make it easier for themselves to adapt to new stages in life. Older people will, accordingly, prefer to continue with their familiar lifestyle in later stages of life (Atchley 1999). In other words, people tend to cope with changes such as those that characterize the transition into old age using the same methods of coping that they learned and adopted throughout life. Relying on past experiences and maintaining activities and roles from the past can help older persons adapt to changes involved in the transition to old age. Although aging does not necessarily lead to a decline in functionality or health, it involves many changes and transitions (Agahi et al. 2006). Retiring from work, losing a spouse, and developing physical restrictions, for example, all affect daily life. According to the continuity theory, people do not change in their old age but rather become more and more like who they were in the past and act increasingly according to patterns they are familiar with from the past (Chapman 2005). Nevertheless, preserving familiar patterns and continuity will not necessarily ensure successful adaptation in old age.

Atchley (1989) distinguishes between internal continuity and external continuity. Internal continuity refers to a person's own perceptions and feelings. It is based on his or her inner personality and emotional coping competence. For instance, an older adult with high emotional competence can use a variety of emotional resources to deal with different events in old age, such as illness or hospitalization. External continuity is manifested in the physical and social environment, in roles and in activities, and in relation to the social environment, using familiar adaptation strategies. Continuity helps strengthen the permanence of older people's worlds in a predictable and, therefore, controllable manner (Nimrod 2010). Continuity is not presented in the theory as a concept that is the opposite of change, but rather as a strategy for coping with change. Clinging to familiar patterns and the tendency toward continuity are put to the test at times that necessitate new experiences and adaptation to changes. The intensive entry of IT, the Internet, and online services into our lives raises questions regarding the continuity strategy since it is possible that

clinging to familiar schemes and patterns does not help the adaptation process, but rather hinders the pace of adaptation and sometimes even prevents it.

The Israeli Context

The usage rate of smartphones and social networks in Israel is among the highest worldwide. WhatsApp has become the most popular instant messaging application in Israel, and Israelis are happy to adopt technological innovations (Malka et al. 2015). Yet, the Israeli society remains a very family-oriented society (Fogiel-Bijaoui & Rutlinger-Reiner 2013). This familism is manifested in behavioral parameters, such as a high marriage rate, a low divorce rate, and a high birthrate. The family is very present in the public sphere, in daily practices, and is central to the individual's identity. Not surprisingly, studies on family relations in old age found that intergenerational relations and familial roles in Israel do not diminish with age. The close family ties that characterize Israeli society are expressed, among other things, by intensive communication and the habit of seeking constant updates on the welfare of family members (Malka et al. 2015).

Research Method

The current research was conducted using a qualitative method that offers an in-depth understanding of the experience of older people when using IT, in order to reveal the subjective meaning of the investigated phenomenon. To that end, the research relies on an interpretive phenomenological approach that strives to understand the essence of the experience as it is perceived by the individuals, assuming that the experience contributes to the subject's world view (Giorgi 1997). Any and every possible human experience (event, thought, feeling, etc.) may become a topic for phenomenological inquiry (van Manen 2017). The phenomenological methods are thus particularly effective in revealing the experiences and perceptions of individuals from their own perspectives. The advantage of the phenomenological approach is that it does not seek the objective existence of the object *per se*, but rather the presence of that object as it is perceived in the experience of the individual. The phenomenological approach was chosen

since it is suited to the purpose of the study, which was to examine the experience of older people in the digital space as it is reflected in their discourse and the meaning they assign to IT. This approach allows the researcher to gain in-depth insights and understand the experience of the interviewees.

Data were collected using semi-structured interviews that integrate pre-determined central questions alongside the flexibility and freedom to create a dialog and raise additional questions during the interview. This format enabled us to let the interviewees talk about themselves and so to better understand their personal experiences in all that pertains to the use of IT and the meaning they attribute to it.

The first questions were designed to ascertain whether or not they have a smartphone, a tablet, or a computer. Next, the interviewees were asked whether and how often they use these devices and what their main uses of them are. Then, we asked about the benefits they derive from these devices and online services, the difficulties and the ways they cope with them, who they turn to when they need help, whether they would like to learn and deepen their knowledge in the field, what they think and feel about the shift toward online services, and more.

Interviewees were recruited by approaching day centers for older people, which then enabled us to come to their premises and interview the older persons who frequent the day centers. All interviews were conducted at the day centers; most of them were conducted in private, face-to-face with a single interviewee, in a quiet side room that was given to us for the interviews. Three of the interviews were conducted in a group setting with several participants; these interviews took place in the day center lobby. The average interview lasted about 1 hour. All quotes presented below are anonymized using pseudonyms to protect the privacy of the interviewees.

Participants

The research population consisted of 40 interviewees, aged 63–93 years, of which 27 were women and 13 were men (reflecting the average gender proportions in day centers). The marital status of the interviewees was as follows: 18 widows, 7 married women, 2 divorced women, 11 married

men, and 2 widowers. Of the interviewees, 30 were Jews and 10 were Druze. Although the sample was small, we maintained heterogeneity among the interviewees in terms of education and occupation. Some of the participants had an academic education and occupations, such as water engineer, school principal, librarian, and teacher, while others had no academic education and worked as an agricultural laborer, bookkeeper, taxi driver, grocery shopkeeper, and so on.

All but two interviewees had smartphones, which were with them at the time of the interview. About two-thirds of interviewees reported having a computer at home, but less than one-third said that they actually use it. Most of their access to IT was via smartphones. Their main use of the phone, beyond conversations, was for messaging, using WhatsApp, taking photos, and searching for useful information on the Internet. Five interviewees reported that they use YouTube.

At the beginning of each interview, we emphasized to the interviewees that the interviews are for research purposes only. We explained the objective of the interview and promised the interviewees that their anonymity would be preserved meticulously. The research was approved by Western Galilee College - the College ethics committee.

Analysis of Findings

The analysis of findings from a phenomenological study consists of a process of arranging and building the entire body of knowledge collected, while decomposing the data into segments and pieces of information and rearranging them differently to comprehend their meaning (Creswell 2012). Based on the phenomenological approach, and as Giorgi (1997) suggested, the interviews were analyzed in several steps. First, each interview was read separately and examined holistically with the objective of identifying primary categories. Then, each interview was analyzed and divided into units of meaning to create information groups that appear to belong to the same phenomenon; this enabled the identification of important themes and sub-themes. The third stage consisted of a comparative analysis, in which all interviews underwent lateral reading according to the previous categorization. The result of this analysis was the formation of broader super-categories or central themes. The organizing principle

according to which the findings will be presented here is based on the central themes that emerged from the interviews.

Findings

The findings presented below are organized according to four central themes that express different levels of resistance to IT, ranging from lack of interest and lack of a sense of necessity, through clinging to familiar patterns that impart a feeling of continuity, to acceptance of the change and willingness to adopt new patterns. The themes exemplify the negotiations the interviewees have with themselves regarding online services, their difficulty understanding the digital language, and the way they construct the narrative around the use of IT.

"I Do Not Surf the Web and I Do Not Miss It"

Hazan (2010) claims that older persons are in a cultural, symbolic space that prevents communication with them and, therefore, interpretation of their words usually reaches a dead end. Hazan proposes, therefore, to reformulate concepts and ways of understanding old age that are free from accepted paradigms, which are apparently ineffective. According to the interviews we conducted with older people in day centers regarding the advantages of IT, it seems that the discourse between us, as Hazan (2010) described it, was sometimes met with a lack of mutual understanding: the older persons do not understand "what they will get from using technology" and "what they need a smart phone for," while we represent the side that cannot understand how one can possibly live without a smart phone or the Internet. Thus, for example, David said:

> What will I do with it? ... I don't go on the internet. I don't miss it, I don't feel that I miss it, because I do what I need to do by phone… Look, I don't think that I'll go buy a computer. Not because of the purchase, I can buy one, but I don't see the great importance. When I need anything, I have my son, I don't need it… I understand that it is important, but so what if I don't have it? Life goes on in any case…

David, like many of the interviewees, feels that, as far as he is concerned, the computer embodies a nonfunctional product that is not part of his

lifestyle. There seems to be a social boundary between the generations regarding the use of IT and the awareness about its advantages. Like Aaron said: "It is not for our generation… Listen, we are not the computer gener-ation. Those buttons don't talk to us," and Daria added, "For us, AliBaba was just a story."

Other interviewees testified that they were uninterested or unable to keep up with the rapid pace of change that characterizes society today. Izzy, for example, said:

> I'm tired now, I'm tired of learning new things. It may not be good or nice, but I've come to the conclusion that once I get to be 80, that will be enough. At 80, you don't have to learn anything new. What I have in my head is enough. I don't want to learn anything new. I'm tired of it. And the changes are also so fast, that I don't have the strength to run after all of the changes. The changes are so fast that you need to be a very strong Superman in order to keep up.

Jim talked about similar things: "I'm too tired, too lazy really, to tell you the truth, really lazy, I have the time, it's just a matter of laziness." Jim shared that he prefers to read books rather than waste his strength on things that are less significant to him. Technology, with all its advantages, does not give him as much happiness and pleasure as a good book.

The enthrallment and dependence of the younger generation on IT in the form of smart phones is incomprehensible to the interviewees; not only do they not need it, they are not even "attracted" to it. Indeed, five interviewees used the words "not attracted" when referring to smart phones. To quote Flora:

> It doesn't attract me, everyone tells me to switch to a new phone, and I say, guys, for me a phone is for making calls and talking, I don't need all these innovations, I really don't need it. I don't like it and I don't need it… I tell them I really don't need it.

Eve said similar things: "I was simply not attracted to it, even when my children said, Mom, we'll buy it for you. I said, no, it doesn't attract me… so I don't need all this technology."

To reinforce and validate the differences between themselves and the younger generation, that is, their children or even grandchildren, older persons tend to compare themselves with their young grandchildren who

are masters of technology while they themselves know and understand nothing. Like Anat testified about herself: "My two-and-a-half-year-old granddaughter said to me, I'll find you the photos, and she really did… my children and grandchildren are masters of technology."

Yael said similar things:

> I don't miss the computer at all, and I don't want to sit down and practice and learn and study. I don't need it. The children wanted to buy me a laptop, but I don't relate to it.

Older people can afford to abstain from using the Internet *inter alia* since they can rely on their children for it. Many of the interviewees told us that any time they need an online service, they turn to their children, or even grandchildren, and ask for their help. For example, David said: "Adi (his son) has a computer, whatever I need, I ask of him."

Anat said similar things: "I have two sons who can do it. It's not that they are available at all times, but whenever I can, I get them to do it."

Although all of the interviewees mentioned that they want to maintain their independence and not to be dependent on their children, their refusal to learn requires them to lean on their children and young grandchildren. Like Anat said: "I have a son who is an engineer at Intel, let him do it. Me, what I don't have to do, I don't do. Let him do it."

Relying on family members is typical of the Israeli society, in which the family holds a very central place. Intergenerational relations are particularly significant, as Israel is a family-centered society. This familiality is manifested *inter alia* in the relatively frequent visits that adult children pay their aging parents, enabling the parents to be helped by the children instead of making an effort to learn.

Some of the interviewees, especially in Druze villages, were religious. It seems that religion adds an additional dimension of deterrence against the use of IT. Omer, for example, recounted: "With us [the Druze], especially the religious people, once people become religious, such things cease to interest them and they are prohibited from engaging in it… so in our religion it's prohibited." Hatem added, "These devices, the computer and phone, didn't exist 20 years ago. So, I never used it, not then and not now. I don't use it at all."

The religious justification for not using IT can disguise opposition to anything associated with modernity and progress. Moreover, in a traditional society, such as the Druse society, which is characterized by crowded social networks, there is awareness to social control. Omar, who lives in a Druze village, prefers to minimize his use of the phone because he is concerned with the possibility of virtual surveillance that could infringe on his privacy: "What I fear is that someone will eavesdrop on me, and it happens. Some people eavesdrop on your phone as soon as you open it. I know someone is listening to my conversations, so I'm careful about what I say and rarely use my cell phone."

Clinging to Familiar Patterns and Longing for the Past

One of the sentences that was repeated in almost all interviews in response to our question about the use of online services was the desire to receive a human response. As Ruth said, "I like to speak with people, not with the computer. Even instead of messages, I prefer to talk. I also don't like to leave messages, I immediately hang up." Lina said similar things: "I prefer to talk to a human being. I very much like to talk to people, not to computers. Like on birthdays, I don't like to leave WhatsApp messages, I call the person and congratulate them."

Furthermore, some of the interviewees mentioned that they feel it is their right to receive a human response and that the state or organization is obligated to provide them with services in the way they want to receive them. Aaron said:

> I went to the bank manager and I told him that I want to receive service, I pay for this service, I've been at this branch for 38 years, and I'm still paying you for service, I deserve service, I want to speak to a human being.

Clinging to familiar patterns and refusing to change past habits manifest in daily life in a variety of activities, such as paying bills. When Daria was asked how she prefers to pay her city taxes bill, she answered:

> No, no, not through the app. I go there physically and pay the clerk. I go there myself, to the place, pay, see the clerk who receives the money, get a nice piece of paper with writing on it as a receipt, with a stamp on it, and I file it.

It looks like Daria prefers tangible confirmation like seeing the clerk and touching and feeling the printed paper receipt. A virtual receipt sent by email does not count as far as she is concerned. The findings also reveal that most of the interviewees cling to familiar habits, like reading newspapers or paper books, or listening to radio or music on tapes rather than over the Internet. To quote Izzy:

> Phones are only for making calls. Only calls. Phones are only for talking… WhatsApp or Facebook is not for my age, it doesn't interest me, I'm not built for that. I'm built for reading. Not for games. If I want to listen to some music, I can also listen to the radio or television. There is everything there. The computer doesn't interest me. A book and that's all. It's enough for me.

Aaron said similar things:

> A magazine I can read. Printed pages that I can understand what is written there, that it should say clearly what time to come, that things should be organized, that's how I know exactly what is there. Some people go on the internet and search, not me. I need things to be in writing.

Nadia presents an even more conservative approach and longs for another era, to which she would like to return:

> I'm from the olden days, darling, leave me alone with all of this progress. Believe me, if I could only go back to the olden days, all of this progress is nonsense. Here, for example, on the phone, I would prefer to have only a landline.

The preservation and continuity trend are manifested also in the language. The language the interviewees used, as well as the world of content they are familiar with, are different and foreign to the IT digital Internet world of concepts. Older people speak the language of modernism, the language of the industrial society, which is essentially different from the post-modern digital discourse of the network individual who has adopted IT and the Internet and has created a completely new world of content and concepts. Thus, for instance, modern industrial discourse consists of regularity and order; it can be corrected, organized, and controlled, while the new digital discourse is more amorphous and is characterized by flexibility, uncertainty, and hybridity. This can be heard, for

example, when Aaron talks about fixing automobiles, knowing that his car mechanical skills are no longer relevant nowadays:

> Automobiles, for example. I used to know how to fix them. Automobiles nowadays are not what I learned and knew. Nowadays you come to the shop, he puts it into the computer, and sees everything, what isn't working, what is working, he adjusts and fixes it… it's a different world. So, I know how it works, but I can't see the things they see. So, I love to stand around and watch, I'm very excited about their knowledge.

Anna's story of her search for a printed manual for the new phone she bought offers another illustration of the differences between the modern technological discourse and the new digital discourse. Her story describes her need to lean on familiar patterns even while physically holding a device that represents a novel technology:

> I recently got a new phone… I don't even know how to begin using it. I opened the box and there were no instructions. I went back to the store and asked them, "Why did you sell me a phone with no instructions?" So the guy at the store told me that they stopped making paper instructions, that it's a waste of paper and nowadays everyone goes on the internet and on the internet they know how to operate the phone. So I don't have it {the phone} with me, I don't use it because I don't know how to do anything on it. I'm always with the old phone. I want to use the new one but I don't know how… the new phone doesn't even have any buttons. Everything is different. I don't even know how to operate it. I tried for like half an hour and I couldn't operate it, so I went back to where I bought it and said, "I want the instructions please," and the salesman said, "There aren't any."

Cracks in the Continuity Strategy

The aging process is characterized by many changes like retiring from work, moving to a new home, losing a spouse, and so on. At the same time, the digital world is changing at such a rapid pace that changes have become a matter of routine. In such a world, people who cannot adapt to the changing environment might find themselves left behind. The continuity strategy and clinging to familiar schemes in a changing world sometimes turn out to be inappropriate strategies for the new world. Thus, alongside the desire to preserve familiar patterns, about half of the interviewees also expressed a wish to learn and take part in the digital world. As Rebecca

said: "We have to get into technology, we cannot stay on the sidelines … we cannot stay behind disconnected from it all, we have to flow with everything there is today." And Dina said: "Now, in the age of the smart phone, how can you be without a phone?."

The need to learn how to use online health services or digital banking services, for instance, motivates some older persons to join computer classes offered at various day centers. Observations we conducted in such classes revealed that older people show interest and practice the new things they learn. Despite the difficulties they reported and the fear of technology, they all expressed satisfaction from the instruction they received regarding the use of computers and smart phones. Alin, for example, whom we met in the computer room at one of the day centers for older people, came in to practice writing and sending emails. She describes her difficulties in learning how to use the computer and the thoughts she has occasionally about quitting and giving up. Nevertheless, she also talks about the urge to continue with the effort and to learn so as not to be left behind:

> It's a kind of technology that develops at a pace so fast that it's impossible. You learn something and suddenly you have developments and more developments, and it's hard, you're constantly chasing the knowledge. So I had a couple of breaking points and I said, "That's it. What do I need this for?" But I didn't give up. I said that if I stop, I won't know it, because the more it advances, the more behind I'll be.

Cracks in the continuity strategy were found among additional interviewees, who are trying to learn, sometimes give up, and then try again so as not to be dependent on others. Rina said: "I want to learn how to extract forms all by myself because I'm very independent and I don't like to depend on anyone… I would really like to do it myself. Not to rely on anyone, because the children are not here with me all the time". Aaron said similar things: "I don't want to depend on anyone, I want to be independent, and to try to solve my problems on my own, as much as possible."

The findings, therefore, expose cracks in the continuity strategy that manifest in an ambivalent discourse about new IT. On the one hand, the interviewees express reservation and a lack of motivation to learn and adapt to the digital world, and on the other hand they recognize the need and desire to change and learn. Almost all of the interviewees have smart phones, and most of them have a computer or a tablet as well.

Cautious Surrender to IT

The fear of IT alludes to older persons' difficulty feeling comfortable and befriending the unfamiliar digital world. Most of the interviewees spoke about their concern about something going wrong, as if it is a mechanical device that might break if the wrong button is pushed. Daria, for example, said: "I'm afraid that I will delete some other file, and if I delete it, how will I make it come back?... In the beginning, it was the fear that I might ruin and spoil, I don't have the confidence for this." Sometimes the fears are irrational, as Alin shared: "I have a fear that if I hit some key on the keyboard then something will happen, and everything will disappear or change, and that stresses me out. I'm afraid that I will spoil it. That I will run into some virus."

The active use of IT, such as writing messages or sending photos, causes anxiety and fear not only because of the fear of causing damage to the technological device, but also because of the shame and dread of being exposed as lacking understanding and basic knowledge and thus becoming the object of ridicule, to quote Anat: "I'm scared of technology... afraid of making a mistake, of something being deleted and mainly afraid of making a mistake... so that nobody knows that I made a mistake, that's the fear. In our generation there was no making mistakes. That's how we were educated." Ruth spoke of similar feelings: "I don't send messages, I only receive them, I don't send at all. Even on Facebook, I only look, but I don't answer anyone, because I write with mistakes. So, I don't want anyone to see. So, when I have no choice, I write, but I don't write a lot."

A person's self-image is constructed and formed through interactions with the immediate social environment and is greatly dependent on the way he or she believes that others see and perceive him or her. There is, sometimes, a contradiction between the way in which older persons see themselves and the way they are perceived by society and the surrounding community. IT can make older people see themselves as ignorant and worthless or as smart and as having broad general knowledge, as Aaron described:

> Everyone thinks that I'm smart but I'm a big fool, so when I go on the computer, I ask questions or I have doubts, and I'm afraid people will think that I don't get something and my memory now isn't what it used to be... I don't want other people to know how much I don't know and that's the truth. Other people may not tell you it, but I'm telling

you the truth, they will see how much I don't know. I'm not going to go study because I'm afraid to study and afraid that people will say that I don't know, I don't know how to print, so what can I do, I don't know how to sit down and write, and I'm not on Facebook with everyone.

Later on in the interview, after sharing his fears and how he avoids using computers, Aaron told us how he discovered that the computer could actually help him appear smart and knowledgeable in a variety of areas:

> When I go to the beach to meet up with friends, I won't go knowing nothing, so I look for subjects they know nothing about, like for example, World War I and II, and then I read about it on the internet and I go prepared. And then when we start talking about wars, I lead the conversation to the subject I specialized in a little, and they think that I know something, but in fact I don't know anything.

Like with the previous aspects reviewed above, here too the findings attest to duplicity and internal contradictions in the interviewees' attitude to technology. Alongside the fear of IT, they are slowly discovering its advantages, as expressed by Ilana, who recently overcame her fear and discovered how to order things from various websites:

> At first, I was scared, but later I began buying clothes on the internet. I bought a lot of things, dresses, overalls, I learned how to take measurements, how to check, so sometimes you fail, I had to return products several times, I was also taught how to check, because it's not always genuine. Here, I bought these boots on the internet… what I have to learn is how to order flights for travel abroad, I don't know how to do that. I would like to learn how to order flights and choose a vacation package.

Since Israel is considered a family-oriented society, keeping in touch with nuclear and extended family members is a common practice. Some of the interviewees were, therefore, willing to make a great effort to learn how to use WhatsApp. They understand that this is almost the only way for them to maintain their connections with the younger members of their family. As Rose said: "I have a family WhatsApp, its name is 'Well then, how was today'. All of my children, and grandchildren participate in the group. They really like when I write to them." Rachel adds: "I use WhatsApp a lot with my family, with my kids, I talk to them on video

calls. I receive and send them pictures. I'm so happy I can connect with them. I'm on WhatsApp all day long."

One of the more surprising findings related to the discovery of the advantages of IT emerged during the interviews with Druze women. These women, who belong to an especially traditional and conservative group in all that pertains to innovation, discovered the advantages of technology, and use it to a considerable extent. Although the use is mainly for needs that preserve the gender-based division of roles, like finding stores that sell knitting yarn or looking for cooking and baking recipes, the use of various technologies constitutes an important tool of empowerment for these women. Such empowerment is manifested both with relation to men who are unfamiliar with the technology and in the autonomy of being active in all-women WhatsApp groups and, thus, creating for themselves a space devoid of male supervision, which is out of the ordinary in a traditional society like the Druze society. As Fatma shared:

> We have a women's group, I talk with the group, we joke, we laugh… we talk all day long, someone made some food and she put a photo of the food she made, yes, and I also had a birthday, everyone congratulated me on WhatsApp… three days ago I made Moghrabieh [a Druze dish], which is like couscous, so I took a photo and put the picture up. Sometimes I'm at home and I want to bake a tasty cake, so I search for cake recipes, something good and easy. I use WhatsApp for everything. Look, I even took a photo of the knitting yarn, so I'll know where to get it from, and I look at knitting patterns on YouTube.

Discussion

The aim of this study was to examine how the technology discourse reflects the way in which older people perceive, experience, and feel about the digital space. Given the heterogeneous older population, the variability in the extent and amount of IT use must be taken into account, and therefore it is difficult to reach generalizations through qualitative research. At the same time, our interviews indicate that most of our informants do not feel comfortable in the digital space. Their technological discourse points to difficulties in adapting to the new digital world.

In the new digital arena, people who do not master social media in its many forms and fail to adopt the new technological discourse might find

themselves left behind – like immigrants in a new and foreign country who do not speak its language. Some of the older persons feel as if they are "time immigrants" and, like many other immigrants, might feel invisible in their new place; they become socially and culturally "transparent" (Lomsky-Feder & Rapaport 2010). They are marginalized and accused of being unable, or unwilling, to adopt the new patterns and function properly in the new system.

Nevertheless, in current societies in which the traditional, the modern, and the postmodern are intermixed, the profile of the older adult is not one-faceted, but is rather the result of flexible age-related boundaries and the mixing of identities and stereotypes (Hazan 2002). Thus, on the one hand, some older persons adopt a young lifestyle, consume leisure and brands that are identified with middle age, try to shed the signs of old age through their clothing, dying their hair, using anti-aging creams, and having medical procedures executed with the promise of a younger look and the loss of several years off their chronological age. At the same time, however, they often object to anything that is identified with IT and online services, preferring their daily newspaper over reading the news on their phone, a human voice reply instead of ordering through an app, paying manually instead of over the Internet, and so on. The interviewees in the present study expressed a wide spectrum of responses to IT: from rejection, a marked lack of interest, and the absence of willingness to learn and befriend online services, alongside responses of acceptance and desperate attempts to learn, to familiarize themselves with IT, and to use it.

The research findings reveal an ambivalent, sometimes incoherent discourse that is laden with internal contradictions regarding IT and the digital world. Thus, some older persons we spoke with have created a hybrid narrative that simultaneously accepts and rejects the digital world. On the one hand, they own and use a smartphone, and on the other hand, they seek familiar and human responses, fighting for their right to be part of the digital world and at the same time giving up on it.

Ambivalence is also expressed in the technology discourse in the family context. Given that Israel is a family-oriented society, almost every family has at least one WhatsApp group, where family members share experiences and upload photos. Although the older family members are

active in these groups, it seems that the attitude of the adults toward such WhatsApp groups is ambiguous. On the one hand, through belonging to the group they feel part of the family, and on the other hand, they feel that WhatsApp has replaced phone calls and even family visits. Moreover, many old people are assisted by young family members, children, and grandchildren in matters related to technology and so the decrease in the frequency of visits hinders their ability to get help from young family members. As one of the interviewees said, "Even when they come to visit, they do not disconnect from the smartphone for a moment and the feeling is that they are not really with us".

Our findings correspond with Selwyn's work (2004), which, although performed 16 years ago, revealed that older adults are profoundly ambivalent toward IT. The ambivalent discourse that characterizes the attitude of the older person toward the use of IT reflects, among other things, a feeling of dependence, entrapment, and distress due to the forced transition to a digital world. Although they adapt to the new world, they do not feel comfortable in it.

The answers we received from the interviewees regarding the use of IT were complex and went beyond mere technical considerations. For some, the scant use of IT stems from a lack of interest or motivation and a preference for familiar patterns; others are adamant about their right to receive the services they are entitled to, in the way they are familiar with. It seems, however, that some understand that clinging to familiar schemes prevents them from adapting to the ever-changing society. The findings also reveal that while some of the interviewees are too tired to keep up with the rapid pace of change, accept the digital gap, and give up, others are actually making an effort to learn and use IT, and even enjoy it and its advantages. They understand that their refusal to "time immigrate" to the digital world, might leave them on the sidelines.

Atchley's (1999) continuity theory claims that older people tend to adhere to familiar patterns, which they found effective for coping with changes. Thus, the way old people talk about the digital world and interpret the new reality according to the schemas they are familiar with from the past gives them a sense of continuity and control over their lives. This does not necessarily mean that they prefer the conservative way and reject changes altogether. Therefore, in our view, continuity theory can

explain different attitudes because each individual continues to rely on his or her unique experience to cope with new challenges.

The theory of continuity can therefore explain both the choice of those who oppose and refrain from using IT, but at the same time, it can also explain the choice of those who want to adopt the online world and be a part of it. This is because different people go through different stations during their life course and accumulate different experiences. But everyone tends to cling to patterns they are familiar with from the past in order to cope with the changes and challenges that the information society invites.

New technologies offer the older population a large variety of means for maintaining social, creative, and intellectual involvement, and they can contribute to their physical and mental integrity. Nevertheless, many older people find it difficult to adopt the new technologies or do not find them useful. As a result, the same people who could have benefited from the technology more than any other population group are those who tend to reject it. It is therefore necessary to understand the reasons for avoiding the use of IT, the cultural context, and the older persons' world view, which lead to objection, to reserved acceptance at times, and at times even to acceptance and adoption. Understanding the socio-cultural contexts and the reasons for avoiding the use of IT may lead to the development of ways that will enable older persons to enjoy the many advantages it holds for them. When the use of IT is planned as a substitute for conventional services, it is necessary to take into consideration not only the technical possibilities and economic considerations, but also and particularly the perspective of the older persons themselves.

Limitations and Future Directions

This study describes the discourse of technology as told to us by old people in day centers. Due to objective limitations, we did not address differences that originate in ethnic, gender, national, religious, or class characteristics. These are certainly variables that are worth exploring in future studies. Moreover, due to the fact that the study population was heterogeneous and characterized by great variability in terms of its attitude to IT, it would be appropriate to conduct comparative studies with reference to additional background variables.

Corresponding Author

Shlomit Manor, Department of Sociology, Western Galilee College, College Road, Akko, 2412101, Israel. Email: Shlomitm@wgalil.ac.il

References

Agahi, N., Ahacic, K. & Parker M. G. (2006). Continuity of leisure participation from middle age to old age. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 61(6): S340–S346.

Angelidou, M. (2015). Smart cities: A conjecture of four forces. *Cities* 47: 95–106. doi: 10.1016/j.cities.2015.05.004

Atchley, R. C. (1989). A continuity theory of normal aging. *The Gerontologist* 29(2): 183–190.

Atchley, R. C. (1999). *Continuity and Adaptation in Aging: Creating Positive Experiences*. Baltimore, MD: The Johns Hopkins University Press.

CBS (Central Bureau of Statistics). (2019). *Selected data from the Social Survey on Internet Usage*. Available on https://www.cbs.gov.il/en/mediarelease/Pages/2021/Selected-data-from-the-Social-Survey-on-Internet-Usage.aspx (Accessed: October 1, 2020).

Chadwick, A. & May, C. (2003). Interaction between states and citizens in the age of the Internet: "e-Government" in the United States, Britain, and the European Union. Governance 16(2): e271–300.

Chapman, S. A. (2005). Theorizing about aging well: Constructing a narrative. *Canadian Journal on Aging* 24(1): 9–18.

Chen, K. & Chan, A. H. (2011). A review of technology acceptance by older adults. *Gerontechnology* 10(1): 1–12.

Creswell, J. W. (2012). *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. Thousand Oaks, CA: Sage.

Fisher, E. (2011). *Capitalism in the Digital Media Age: The New Economy and Technology Discourse*. Tel-Aviv: Resling Publications.

Fogiel-Bijaoui, S. & Rutlinger-Reiner, R. (2013). Introduction: Rethinking the family in Israel. *Israel Studies Review* 28: vii–xii.

Friemel, T. N. (2016). The digital divide has grown old: Determinants of a digital divide among older people. *New Media & Society* 18(2): 313–331.

Giorgi, A. (1997). The theory, practice, and evaluation of the phenomeno-logical method as a qualitative research procedure. *Journal of Phenomenological Psychology* 28: 235–260.

Golant, S. M. (2017). A theoretical model to explain the smart technology adoption behaviors of elder consumers (Elderadopt). *Journal of Aging Studies* 42: 56–73.

Goldschmidt, R. (2017). *Internet and Digital Services for Senior Citizens*. The Knesset Research and Information Center.

González, A., Ramírez, M. P. & Viadel, V. (2012). Attitudes of the older persons toward information and communications technologies. *Educational Gerontology* 38(9): 585–594.

Hakkarainen, P. (2012). No good for shoveling snow and carrying firewood: Social representations of computers and the internet by older persons Finnish non-users. *New Media & Society* 14(7): 1198–1215.

Hazan, H. (2002). Aging in the global village. In Y. Brick (ed.), *Politics on Old Age* (pp. 30–50). Tel Aviv: Hakibbutz Hameuchad.

Hazan, H. (2010). "Anthropologist on Mars": Invitation to the dead-end labyrinth of old age studies. *Gerontology* 37(1): 23–35.

Lee, B., Chen, Y. & Hewitt, L. (2011). Age differences in constraints encountered by older people in their use of computers and the Internet. *Computers in Human Behavior* 27(3): 1231–1237.

Lomsky-Feder, E. & Rapoport, T. (2010). *Visibility in Immigration: Body, Gaze, Representation*. Jerusalem: The Van Leer Jerusalem Institute and Hakibbutz Hameuchad.

Malka, V., Ariel, Y. & Avidar, R. (2015). Fighting, worrying and sharing: Operation "Protective Edge" as the first WhatsApp war. *Media, War & Conflict* 8(3): 329–344.

Mitzner, T. L., Boron, J. B., Fausset, C. B., Adams, A. E., Charness, N., Czaja, S. J. & Sharit, J.2010)). Older adults talk technology: Technology usage and attitudes. *Computers in Human Behavior* 26(6): 1710–1721.

Niehaves, B. & Plattfaut, R. (2014). Internet adoption by the older persons: Employing IS technology acceptance theories for understanding the age-related digital divide. *European Journal of Information Systems* 23(6): 708–726.

Nimrod, G. (2010). Older people' online communities: A quantitative content analysis. *The Gerontologist* 50(3): 382–392.

Robinson, L., Cotton, S. R., Ono, H., Quan-Haase, A., Mesch, G., Chen, W. & Stern, M. J. (2015). Digital inequalities and why they matter. *Information, Communication & Society* 18(5): 569–582.

Russell, H. (2011). Later life ICT learners ageing well. *International Journal of Ageing and Later Life* 6(2), 103–127.

Seifert, A. & Schelling, H. R. (2018). Older people online: Attitudes toward the Internet and coping with everyday life. *Journal of Applied Gerontology* 37(1): 99–109.

Selwyn, N. (2004). The information aged: A qualitative study of older adults' use of information and communications technology. *Journal of Aging Studies* 18(4): 369–384.

Siegrist, J. & Wahrendorf, M. (2009). Participation in socially productive activities and quality of life in early old age: Findings from SHARE. *Journal of European Social Policy* 19(4): 317–326.

Siriaraya, P., Ang, C. S. & Bobrowicz, A. (2014). Exploring the potential of virtual worlds in engaging older people and supporting healthy aging. *Behaviour & Information Technology* 33(3): 283–294.

Van Manen, M. (2017). Phenomenology in its original sense. *Qualitative Health Research* 27(6): 810–825.