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ULTRA-ORTHODOX TELELEARNING DURING COVID-19: PARENT, TEACHER, AND PRINCIPAL PERSPECTIVES ON ITS EFFECTIVENESS

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ABSTRACT

Aim/Purpose	This study addresses telephone learning channels during the coronavirus period in the ultra-Orthodox sector in Israel. The purpose of the study is to examine the effectiveness of the online and recorded telephone channels and the way they were perceived by the student's parents and educators.
Background	The ultra-orthodox society's lack of use of online means has created many distant learning challenges for learners and educators.
Methodology	The study combines quantitative and qualitative methods based on a comprehensive survey of parents of elementary school-aged children (N=395) and semistructured interviews (N=45) with parents, principals, and teachers in ultra-Orthodox schools.
Contribution	The study describes a unique learning system in a unique population group, which does not use online means, from various points of view in the educational system.
Findings	The results of the study indicate that parent attitudes toward telephonic learning – synchronous and asynchronous – are critical and that evaluations of its effectiveness are negative and ineffective. This evaluation stems from a variety of challenges faced by the learners: technical challenges related to the problematic infrastructure and terminal accessibility issues; didactic challenges related to adapting the learning style to the character of the students and their age; challenges arising from the characteristics of the medium: the lack of a visual dimension, its function as a one-way channel, and the lack of potential for effective interactivity; and the need for parental involvement and

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	spatial challenges resulting from the crowded and limited learning space at home.
Recommendations for Practitioners	Based on the research results, and in order to meet the challenges of a future pandemic or similarly disruptive crisis, telelearning spaces must be improved significantly.
Recommendations for Researchers	The results can be used to examine how other unique communities, especially those that avoid the use of online means, are managing distance learning in a crisis.
Impact on Society	It was found that telephone learning in ultra-Orthodox society during COVID-19 failed to realize the learning potential inherent in this channel for a number of reasons discussed in the article and failed to create the learning conditions necessary for telephone learning to succeed, as demonstrated in previous studies.
Future Research	In a similarly disruptive crisis, future research should see whether or how telelearning spaces have improved or whether other learning methods have been adopted by the ultra-orthodox public.
Keywords	distance learning, Covid-19, enclave communities, telelearning, ultra-Orthodox

INTRODUCTION

The coronavirus pandemic forced educational systems around the world, especially in Israel, to adjust to the suspension of routine activities and the transition to distance teaching and learning (DTL) patterns. The vast majority of institutions used Internet-based distance learning systems. In the Israeli context, at the beginning of this period, these were online classrooms combined with synchronous lessons produced by the Ministry of Education and broadcast by special studios for each age group. In a short time, the system adapted to integrated learning, enabling two-way interaction through software such as Google Classroom and Microsoft Team, although most learning was soon based on the popular Zoom software, which enables a variety of communicative and pedagogical functions (Stefanile, 2020).

Even the ultra-Orthodox sector in Israel, whose attitudes toward the digital space are complex and tend to be negative, especially in regard to the inclusion of children and young people, had to adapt to the new challenges of the epidemic and offered distance learning alternatives that conform to its social norms and conservative values. Indeed, during COVID-19, most ultra-Orthodox schools learned through telephone-based learning spaces – asynchronous audio instruction and synchronous lessons made possible by dedicated telephone exchanges (Katzburg, 2020; Nachshoni, 2020; Rabina, 2020). The purpose of this study is to describe the characteristics of telephone-based learning during the coronavirus period in the ultra-Orthodox sector and to analyze the attitudes of parents, teachers, and managers in the sector regarding the quality of learning, its effectiveness, and its limitations. We believe that an in-depth look at this unique communication channel and learning space will provide insights into the educational sector and help streamline learning in case of future emergencies.

THEORETICAL BACKGROUND

ULTRA-ORTHODOX SOCIETY IN ISRAEL: VALUES AND DEMOGRAPHICS

The unique characteristics of ultra-Orthodox society, an ideological and social “enclave culture,” stem from the attempt to ensure that the modern lifestyle in the surrounding society does not interfere with their values, their way of life, and the conservative education of their children (Sivan,

1995). Their core values include: a commitment to Jewish tradition and halacha (Jewish law); defining the study of Torah as the ideal vocation for the fulfillment of men's individual lives in the community; observing modesty in the areas between the sexes; obedience to the Torah teachings of the rabbinic leadership, even in areas that are not clearly halakhic; and passing on the values of the tradition from generation to generation, emphasizing the importance of education as of primary importance in the order of personal and community priorities (Brown, 2017; Stadler, 2009). To realize these values, ultra-Orthodox society uses physical seclusion and patterns of separation (e.g., segregated spaces in communal residences), symbolic differentiation (e.g., unique clothing), and avoidance or limitation of contact with secular content and cultural worlds, including general means of communication and the Internet (Neriya-Ben Shahaar, 2017; Rashi & Rosenberg, 2017).

By 2022, the ultra-Orthodox population in Israel has reached 13.3% of the total population. In 2019-2021, the average ultra-Orthodox birth rate per family was approximately 6.5 children. In contrast, the average rate in OECD countries is only 1.6 children, while the average rate among non-Orthodox Jews in Israel is 2.5 children. The ultra-Orthodox population in Israel is characterized by an average of 5.2 persons per household, compared to an average of 2.8 persons per household in the general (non-Orthodox) population. Data from the Central Bureau of Statistics show that the majority of the ultra-Orthodox population (66%) lives in apartments with 2-4 rooms, while the majority of the general population lives in apartments with 3.5 rooms or more. Only 26% of the ultra-Orthodox sector live in apartments with 4.5 rooms or more, compared to 35% in the general sector. Twenty-four percent of the ultra-Orthodox sector report living with a high density of two or more people in one room, compared to only 2% in the general community (Chudi, 2016). These data suggest that the majority of ultra-Orthodox students live with their extended family in relatively small apartments and share their rooms with multiple siblings.

ULTRA-ORTHODOX SOCIETY'S ATTITUDE TOWARD DIGITAL MEDIA

The attitude of ultra-Orthodox society toward mass media is suspicious and stems from the conflict between their conservative world and modern culture mediated by new technologies (Blondheim & Rosenberg, 2017; Sabag-Ben Porat et al., 2022). Television, for example, is completely rejected and is almost nonexistent in ultra-Orthodox households, with the secular press and radio stations seen as problematic, although their ultra-Orthodox counterparts exist. Seeing the advent of the Internet in the 1990s as a serious threat to their values and community boundaries, the ultra-Orthodox engaged in a persistent struggle and massive campaign aimed at preventing its spread. Although this campaign at first seemed to be successful, with the establishment of the Internet as a necessary tool for work purposes, more moderate rabbinic voices started to allow limited and functional Internet use while maintaining strict limitations, which include installing filtering software and especially keeping it out of the reach of children (Cohen, 2013; Neriya-Ben Shahaar & Lev-On, 2013). It is important to note that these accommodations only apply to adults who rely on the Internet for their livelihood. As noted, Internet exposure to children, teenagers, and especially yeshiva students - even if for educational purposes - remained strictly prohibited (Mishol-Shauli et al., 2019; Nadan et al., 2019)

TELEPHONIC LEARNING: FROM THE 1970S TO THE COVID-19 PANDEMIC

In reaction to the COVID-19 pandemic, the ultra-Orthodox education system adopted a variety of alternative and unique distance learning strategies centered on a system of 'content lines': recorded telephone broadcasts and synchronous telephone instruction that each educational institution operated independently (Breitkopf, 2020; Weisberg, 2020). One of the most studied topics in the last three years, both worldwide and in Israel, distance learning in schools during COVID-19 has been researched from different perspectives: pedagogical, educational, technological, and psychological. Many studies have examined the attitudes of students (Agustina & Cheng, 2020), parents (Misirli & Ergulec, 2021), teachers (An et al., 2021), and administrators (Zincirli, 2021) in relation to online

channels, focusing on their effectiveness and limitations. Other researchers have looked at the challenges parents face when trying to support their children in distance learning (Daniela et al., 2021), digital gaps, and technical challenges related to the accessibility of online channels (Hermanto et al., 2022). These and many other studies have focused on online learning channels, while the telephone learning channels used in the ultra-Orthodox society have hardly been studied.

The telephone has a long and rich history as a distance learning technology, although relegated to the shadow of newer video and digital media technologies. The pioneering use of the telephone as a learning tool occurred as early as 1893 by Hungarian entrepreneur Theodore Puskas, who established a subscription program for learning languages by telephone (Kenning, 2007). Telelearning systems were introduced and institutionalized in the 1960s and became popular in the 1970s and 1980s, especially at colleges and universities (Olgren & Parker, 1983). For example, by 1986, it was possible at approximately 70 colleges and universities to receive academic credit for courses taken via telephone distance learning. In a large-scale College of Wisconsin project to provide learning by telephone, approximately 80% of the students who participated in the project described the learning experience as positive and recommended that others try it themselves (Olgren, 1997). The advantages of telephone learning over other communication systems are primarily its technical simplicity, which allows access by those who do not have complex technological skills, the spatial flexibility of the available connection terminals, and its low price (Moore & Thompson, 1990; Olgren, 1997). The disadvantages are the lack of a visual dimension in teacher-student communication, a situation that requires high attention and concentration, leading to fatigue and making learning difficult (Ostendorf, 1989), and a sense of interpersonal distance that is exacerbated by the lack of verbal cues that contribute to a sense of psychological distance (Wellens, 1986).

Despite these shortcomings, studies that have looked at the effectiveness of learning by telephone have found that it is not inferior to learning via video channels or face-to-face instruction, provided that some additional conditions are met (Anderson & Garrison, 1995; Fowler & Wackerbarth, 1980; Garrison, 1990). The maximization of learning occurs when the teaching strategy enhances the interactivity characteristic of face-to-face learning by involving students in active learning through discussion, questions, and answers and when the absence of the visual dimension is compensated for by supplementary print materials. In this way, it is also possible to compensate for the absence of the interpersonal proximity dimension through activities that support the learner's mental processes. For this reason, several researchers emphasize the need to adhere to unique strategies for telelearning: accurate planning and early design of telelearning spaces, the informal opening of the meeting, setting rules for classroom management and participation, combination of visual materials, division of learning into short and varied segments with frequent repetition and summaries, combination of interactive activities and small group meetings, creation of a social atmosphere through such means as name-calling, personal address to participants, personalized assignments, methodological and vocal variety in learning, and continuous feedback on the effectiveness of learning (Harris & Tarrant, 1983; Olgren, 1997; Ostendorf, 1989). Another important aspect emerges in a study that examined the success of a College of Wisconsin telelearning program. Here, the researchers emphasize the organizational factor as the most crucial – an organization that combines activation of the technological, content, and communication factors and includes ongoing support for the recipients (Reid & Champness, 1983).

These studies were mainly conducted in the 1980s and 1990s, although with the development of online channels, institutionalized telephonic learning and research examining it has become rare. Even during the coronavirus crisis, which forced schools around the world to establish distance learning options, most learning took place through digital channels and video applications such as Zoom. It is true that ultra-Orthodox society is not the only community where one can find a complex attitude toward the Internet space. Other traditional communities, such as the Amish and the Mennonites, faced similar challenges during the coronavirus period due to the limitations of certain communication technologies (Corcoran et al., 2022; Stein et al., 2021). However, as far as we know,

these groups did not use telephone channels when it came to learning. In Israel, especially among teenagers, cell phone is a very dominant part of the lifestyle (Ophir et al., 2020; Rosenberg et al., 2022), but this is not the case in ultra-Orthodox society. In Amish communities in the U.S., where there is no access to digital communications at home, access to landlines and cell phones is also limited, and distance learning mostly takes place independently using printed workbooks (Lynch, 2020). In other conservative communities, where there is partially restricted access to the Internet, especially for children and male youth such as the Mennonite communities in the U.S. and the Modern Orthodox in Israel, online learning did take place (e.g., Dager, 2020). As far as we know, apart from occasional and experimental applications of telephonic learning (e.g., Ludwig et al., 2021), ultra-Orthodox society is the only group in which schools prefer institutionalized telephonic learning to learning through digital channels.

The case study of ultra-Orthodox society during COVID-19 is thus an important opportunity to assess the characteristics and efficacy of contemporary telephonic learning. This context is important both because of the broad scope of learning and because the telelearning experience took place in elementary and high school settings, in contrast to the studies described above that dealt with learning in academic settings, and because of the ‘envelope’ dimension, i.e., the home dimension in which learning took place, and the involvement of parents and perhaps other factors. In this article, we aim to paint a comprehensive picture of the dimensions of telephone learning and its scope compared to other learning channels while assessing its effectiveness and challenges by combining quantitative and qualitative instruments as well as different perspectives: parents, teachers, and principals. With this in mind, the research questions are as follows:

- (1) Which distance learning spaces were actually used during COVID-19 in ultra-Orthodox educational institutions, and to what extent?
- (2) What challenges arose from the use of telelearning spaces, and how did parents, teachers, and principals deal with them?
- (3) How did parents, teachers, and principals evaluate the effectiveness of telelearning spaces?

STUDY DESIGN

To draw a comprehensive picture of the topic under discussion and to include the diverse viewpoints of the participants, we included two user groups: (a) female teachers, male teachers [rabbis] and principals of institutions, and (b) parents of the children. The integration between the groups aims to provide as complete a perspective as possible in terms of the telelearning process during COVID-19 in the ultra-Orthodox community, encompassing its key figures.

The study used a complex (multimethod) research approach (Fontana & Frey, 1998), combining quantitative and qualitative research methods. This allowed the empirical conclusions to be more precise and paint an up-to-date and comprehensive picture of the situation while at the same time deepening the individual findings from the qualitative dimension (for a discussion on the effectiveness of combining these methods in studies in education, see Asterhan and Rosenberg (2015)).

COURSE OF RESEARCH AND RESEARCH TOOLS

The research was conducted in several steps:

- A. In the first phase, in order to prepare the survey questionnaire, exploratory interviews were conducted with two parents, two teachers, and the head of an institution in the ultra-Orthodox sector to obtain a general picture of the situation and the main challenges. Based on the exploratory interviews, we identified the variety and the main of study channels, as well as the most significant disruptive factors. Based on this data, we created the quantitative questionnaire.

- B. In the second phase, a questionnaire was administered to parents of school-age children (6-18 years old) to explore the extent to which the telelearning spaces used in the ultra-Orthodox sector during COVID-19 were utilized, the challenges associated with their use, and the extent to which they were effective in the eyes of the parents. Finally, demographic variables, such as specific ultra-Orthodox communal affiliation, were examined. The questionnaire was administered through a telephone sample survey by the Askaria polling institute, which specializes in targeting the ultra-Orthodox sector and includes intra-Orthodox groups, community, and geographic segmentation. The preference for the telephone survey over an online survey is intended to enable reaching all strata of parents in the ultra-Orthodox sector, including those without Internet access. In the quantitative questionnaire, the subjects were asked about their use of each of the channels, the effectiveness of each of the channels, their preference for the different channels, the difficulties they encountered, as well as the number of possible disruptive factors in the channels.
- C. Semi-structured interviews with parents, principals, and teachers in ultra-Orthodox schools were conducted simultaneously with the implementation of the survey and subsequently. As noted earlier, the qualitative approach supports our intention to provide rich information that helps us gain a deeper understanding of the phenomenon and identify the approaches, perspectives, and influencing factors that shape the behaviors in question (Maxwell, 1996). Interviews included questions designed to outline the alternative learning strategies and the pedagogical, educational, and cultural considerations for choosing one method or another, with a focus on telelearning spaces. In the qualitative questionnaire, the subjects were asked how they experienced telelearning, what challenges they encountered during learning and how they overcame them, and what their thoughts were on online learning options.

In order to find interviewees, messages were circulated on the social networks of researchers, research assistants, students, and other colleagues to collect contacts from the ultra-Orthodox sector. The contacts were asked to help find known interviewees among their families, circle of friends, and educational institutions. Interviewees themselves were also asked to recommend additional candidates for interviews using the snowballing method. In collecting subjects, care was taken to reach a wide variety of interviewees, both by gender and communal affiliation, to reflect a variety of possible perspectives and positions. This phase was intentionally extended over several months, during the waves of the coronavirus outbreak, between closures, and during and after closures, to obtain a situational picture that is not exclusive to a particular point in time, where the conditions of the studies may differ from conditions at other times. However, it is important to clarify that distance learning continued throughout that time period and, therefore, did not affect the study. In cases where the importance of the exact context in which the interview took place was raised, relevant details were noted in the text.

THE POPULATION OF THE SURVEY SAMPLE

Of all respondents who answered the questionnaire (N=637), 395 participants had children of elementary school age and above, of whom 45% (N=178) were women and 55% (N=217) were men. The number of children among all participants ranged from parents who have one child to parents with ten children. A total of N=1348 children were reported in the entire sample. The age of the respondents ranged from 24 to 62 years, with a mean age of 35.8 years (SD=7.22).

THE POPULATION OF INTERVIEW RESPONDENTS

A total of 45 subjects participated in the study, including 30 women and 15 men. The gender bias stems from the fact that most of the institutions for boys were closed for a very short period of time, and distance learning was mainly in girls' schools, so interviews with teachers were more relevant.

However, in retrospect, the composition of the respondents offsets the slight gender imbalance inherent in the survey.

Due to time constraints, the interviews were conducted by telephone and lasted between 30 minutes and an hour and a quarter (an average of approximately 45 minutes per interview) during the months of April 2020 through January 2021. Interviews were recorded, transcribed, and analyzed using the thematic organization method, in which key themes that emerged from the data were mapped and identified in accordance with the research questions (Ryan & Bernard, 2003). In conducting the research and writing the report, special attention was given to ethical considerations, strict privacy, and the anonymity of both the interviewees and the details of the individual stories from their work that they described during the interview. The names of interviewees that appear below were changed while maintaining their gender and role. In some cases, technical and biographical details were changed from the transcript of the interviews (Allmark et al., 2009).

RESULTS

DISTANCE LEARNING CHANNELS: A SNAPSHOT

Distance learning in ultra-Orthodox institutions took place through a variety of channels, usually through several simultaneously: asynchronous telephone learning (in 90% of the homes), synchronous telephone learning (73%), independent learning using booklets and worksheets provided by the school and delivered by hand (84%) or by email (23%), use of lesson audio files (11%), and in some cases online learning, primarily through the Zoom application (14%) (see Figure 1).

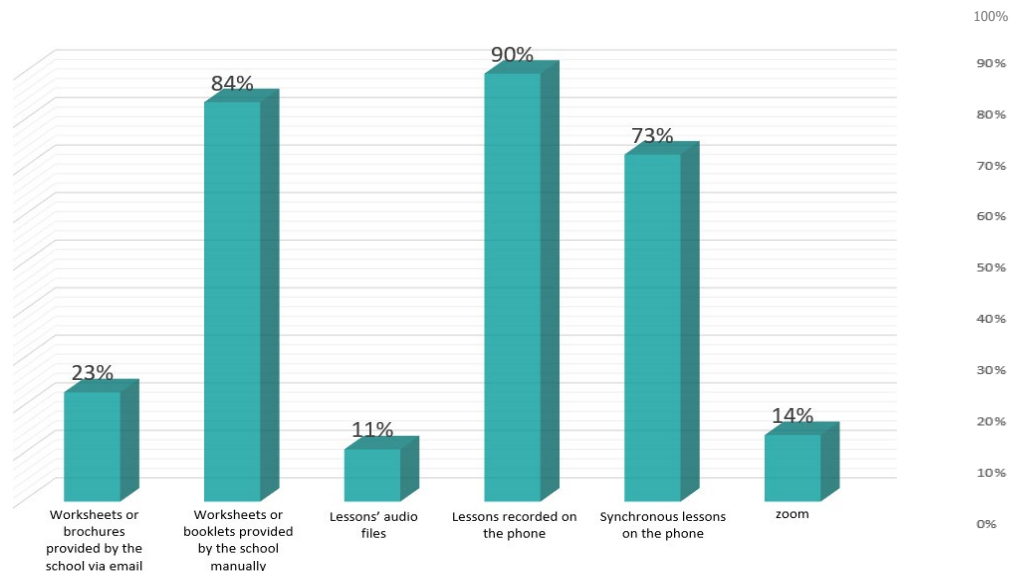


Figure 1. Frequency of use of distance learning channels during the Coronavirus period

As noted earlier, most learning in the ultra-Orthodox sector during the coronavirus period took place by telephone. Shortly after the first lockdown began, between Purim and Passover (March 2020), communications companies offered educational institutions technological solutions based on “sound spaces,” a type of synchronous and asynchronous conference room. The educational institution acquires a central telephone line through which students, teachers, and parents can call. From there,

they are routed to the appropriate spaces: classrooms divided by grade and designated message spaces, e.g., for messages from principals to parents, from teachers to students, from students and their parents to the teacher, and so forth.

The asynchronous telephone learning channel allows teachers to connect to a communication system by telephone, record themselves, and store the recording in a designated space for students in the class. Once the system makes the recording accessible, students can call the designated phone number, connect to their classroom via a call router, enter the appropriate class number, and listen to the recording of the lesson at the desired time.

Telephonic synchronous learning involves a multiparticipant conference call, also in separate classrooms, and control over muting the participants resides with the teacher, the call router. Over time, the systems were perfected and, as mentioned earlier, became the main learning channel in almost all schools.

In the first closure, it was less good because [...] there were more recordings than live broadcasts as the system was not yet built for live broadcasts. The second closure was better; there were both recordings and live broadcasts (Yohanan, 2nd grade Talmud Torah teacher).

[Note: The age of the interviewees was not specified as many of them refused to reveal their age or asked not to be specified.]

In the first wave, there was a kind of exhausting period of adjustment to the new system: “We did not know how to deal with it ... it was a real nightmare to study there” (Yitzhak, father of three). In the second wave, students, parents, and teachers learned to deal with the system, and the schools (especially the girls) tried to get used to a school routine. The telephone lessons – recorded and synchronous – were generally shorter than a regular lesson and usually lasted between fifteen minutes and half an hour and, in some cases, especially in the case of Gemara (a Jewish manuscript) lessons for yeshiva students, longer.

Through the telephone channels, parents and children were kept informed of the schedule of future synchronous lessons and the presence of new asynchronous recordings uploaded to the system. Monitoring was done by listening to teacher messages in a special voice mailbox. In most institutions, parents or children had to call this box from time to time to listen to the recorded message with the relevant information. In some institutions, a system known as ‘Voice WhatsApp’ was activated and adapted to users of kosher phones that cannot receive text messages. The system works on the principle of ‘hanging up,’ i.e., a short ring of the phone and an immediate disconnection to alert the presence of a new message in the voice mailbox.

In many schools, live teaching and asynchronous recording were used in combination to maximize the effectiveness of both channels:

What I would do in addition to live is a recorded lesson, if the recording is the basis for what we learned that day, for those who cannot do it live, so they have some kind of basis in the recording (Yohanan, 2nd grade Talmud Torah teacher).

Another learning channel was the distribution of printed materials for self-learning. In some institutions, this method was widely adopted in the first wave of learning until the other channels were established. For example, Pnina, the director of a girls’ school, explains the following:

When we started and the coronavirus was a new thing [...], we mainly sent material to the girls from Purim to Passover. We went door to door, prepared a folder with extensive, timely material, and the girls worked with the material in the folder under the guidance of the teachers who sent messages. When we saw that the coronavirus was becoming something [long], we realized that we had to do something more organized.

Other schools continued this way throughout the period at the same time as the telephone channels. In many of them, the learning tools were invested in and aimed not only at pedagogical goals but also

at social goals such as strengthening the interpersonal relationship between teachers and students. The interviews show a great appreciation for the investment in this channel and its effectiveness. Learning materials were delivered to their destination in a variety of ways – they were distributed to parents and students at home, physically placed in and collected from the school, and sent to families by mail, fax, or electronic mailbox where available. Some schools used portable storage devices (USBs) loaded with learning materials. Some parents complained that they had to buy a printer to receive the materials in computer file form, claiming, “The amount of pages they wanted to print is illogical.” However, the interviews indicate that the printed learning materials were not synchronized with the audio lessons but functioned as a separate learning channel.

EVALUATING THE EFFECTIVENESS OF AUDIO LEARNING SPACES AND ADDITIONAL CHANNELS

From the analysis of the quantitative results, as well as from the analysis of the in-depth interviews, such as the quote just cited, the printed worksheets distributed to the students were rated as most effective by the parents ($M=3.51$, $SD=1.02$, see Figure 2), followed by the distribution of audio files of the lessons ($M=3.00$, $SD=1.07$), a channel used by only a small percentage of the schools.

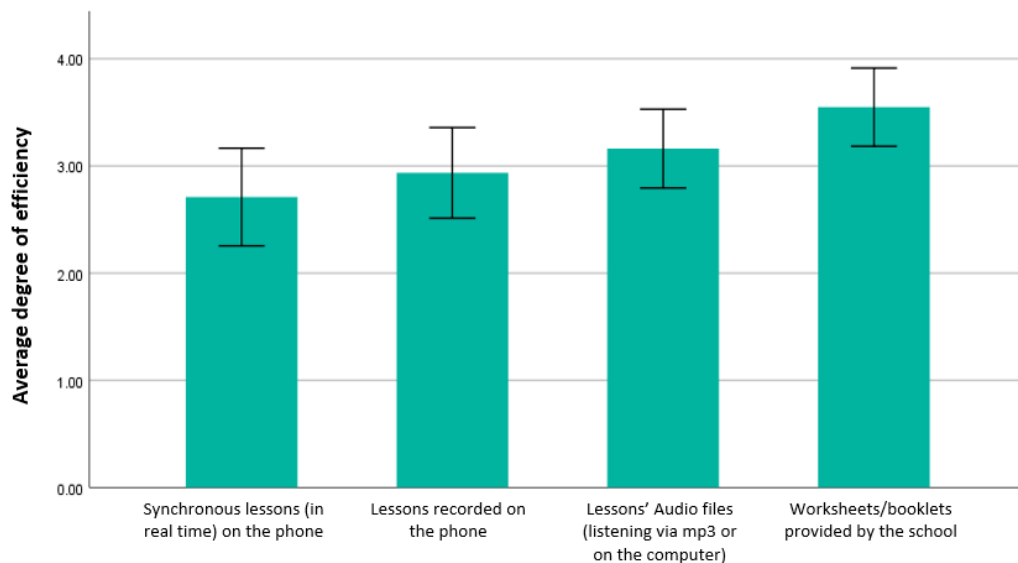


Figure 2. Level of perceived effectiveness of each of the distance learning measures

Note: The error bars indicate the confidence interval (CI95%).

Compared to the printed worksheets, the evaluation of the effectiveness of learning over the phone, which, as mentioned, was the main learning channel, was quite negative, both in relation to the asynchronous phone lessons that were prerecorded ($M=2.99$, $SD=1.06$) and even more so in relation to the synchronous lessons ($M=2.87$, $SD=1.10$). A paired-sample t-test showed that the mean scores of the ratings of the effectiveness of learning from recorded/synchronous lessons on the phone were significantly lower than the mean scores of the ratings of the effectiveness of the printed worksheets [recorded lessons: $M_{diff}=0.51$, $t(72)=3.38$, $p < 0.005$; synchronous lessons: $M_{diff}=0.49$, $t(70)=3.20$, $p < 0.002$].

A similar and even more negative picture emerges from the interviews. Many of the respondents used harsh words and defined learning by phone as “very ineffective” and “just a pastime,” with others asserting that “children stop learning over the phone and do things quietly because it just does

not work” (Yitzhak, father of three). Some saw it as a failed attempt to prove that there was some kind of alternative to closed institutions: “It’s not real learning. It was just for nothing. It’s like somebody felt good because they learned ‘as if.’ I do not know who should have felt good, but that is just nonsense” (Sarah, mother of four).

THE CHALLENGES OF TELELEARNING

Technical challenges

The negative evaluation of learning by phone stems primarily from the challenges related to the technical limitations of the channel. One challenge is the *technical challenge*. First, it was the problem of lack of accessibility to end devices: phones and cell phones (average rating of difficulty of lack of technologies, $M=2.50$, $SD = 1.48$, see Figure 3).

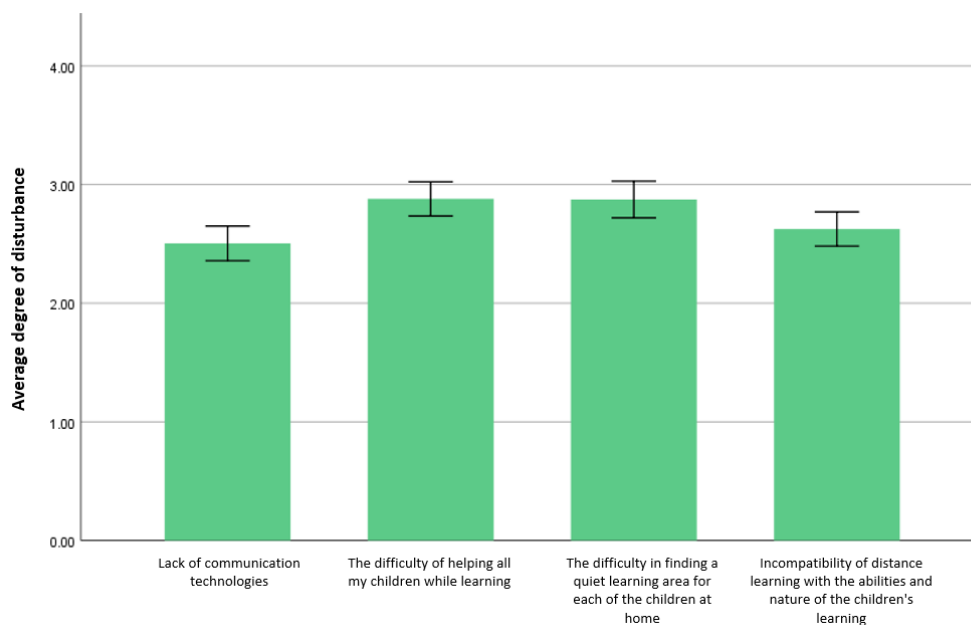


Figure 3. Average estimated usage disturbance degree of each factor - survey

Note: The error bars indicate the confidence interval ($CI = 95\%$)

In fact, approximately half of the survey respondents reported that the number of phones in their homes increased during the coronavirus. In addition, respondents reported high payments to Bezeq (the Israeli main telecommunications company) and the need to extend term packages for cell phones. While there was an attempt by agency officials to distribute kosher devices to needy families, apparently, not all were able to benefit:

They talked about giving every child a kosher phone, but nothing was done. That is why, for example, I pay almost five hundred NIS to Bezeq instead of one hundred NIS in a normal month, just because I do not have enough devices. (Neva, mother of five children)

An important technical issue raised in the interviews concerns the technical infrastructure of the phone system, especially at the beginning but also throughout the learning phase. Without exception, all users reported repeated line crashes and interruptions due to an overload of the telephone switchboard, which completely interrupted the learning process:

The live broadcasts were a nightmare, to this day the line goes down, and then they try to upload and the lines do not work ... a nightmare, a real nightmare [...]. Every day they

opened a different line, a different phone number, because it was down. In addition, also the mobile phone providers made a killing; it is also the policy of the companies, they blocked lines themselves. (Sarah, mother of four children)

The technical difficulties led many of the institutions to move synchronous classes to the evening hours because the lower load on the phone lines reduced the interruptions of the calls. For their part, teachers reported long recordings that were interrupted in the middle, forcing them to record the same texts repeatedly. It turned out that in some cases, the kosher mobile devices in the communication system were not working properly. Trying to cope with the errors added stress to the busy day:

[The telephone system] is not designed for twenty-five families to call from each building. Each family has an average of five to six children who need a cell phone. If they all call at certain times, everything breaks down. It is not a normal situation that at an hour like this, on average thirty percent [users] are calling, suddenly it is two hundred percent, and basically the whole line breaks down. They try to dial a line, but it is impossible. That is why in the second wave we [the teachers] came to Talmud Torah, and there were lightning-fast lines, and from there we taught the lessons. (Yohanan, second grade Talmud Torah teacher)

Didactic challenges: Attention and concentration

Even more complex were the didactic challenges and incompatibility of distance learning with children's abilities and ways of learning ($M=2.62$, $SD=1.45$). Many of the respondents explained this finding and described the children's severe concentration and stamina difficulties, especially in relation to audio instruction:

Distance learning is not relevant [...] we try, but it's terribly difficult over the phone. It is not even a Zoom, if you understand. It's a phone, listening on the phone is easy. So he loses concentration very, very quickly, even though he's a focused kid. He does not have concentration problems. On the phone, it's difficult for him. (Leah, mother of three children)

The concentration difficulties stemmed from, among other things, the nature of the telephone communication platform, which requires exclusive concentration on the audio channel without visual stimulation: "It is difficult and unbearable for them to listen to the phone in this monotonous way without seeing the teacher. They only focus on listening; there is nothing visual for them to see, and that requires more effort and concentration" (Leah, mother of three children). For children with attention and concentration problems, the challenge is even greater. This is how Naama, the mother of a diagnosed child, describes it:

Those who have attention disorders and don't have a framework are a problem. I don't think children with attention disorders were taken care of during the coronavirus. It is difficult for normal children, even more difficult for normal ultra-Orthodox children, and even more difficult for ultra-Orthodox children with attention deficit disorder in general because these children have nothing frontal, not even a Zoom. A child with an attention disorder needs something frontal; he does not know what to focus on. As soon as he is on the phone, he has nothing to focus on.

Many parents emphasize that concentration difficulties increase, especially in subjects such as math, English, and Hebrew. While religious subjects such as Torah and Halacha are more suited to one-sided learning with less learner participation, the weekly lessons require greater concentration, visual aids, continuous practice, and so on:

In Torah lessons, it was relatively good: Halacha, Prophet, and Pentateuch... explanations that can be done over the phone were better ... [But] on things like math, it is impossible not to show the child those things on the board. You have to do something tangible ... (Yohanan, 2nd grade Talmud Torah teacher)

However, many of the parents who saw that their children were having difficulty listening to all the lessons preferred to focus on the secular at the expense of the sacred subjects. The concern is that secular materials are more difficult to complete, and the gaps that occur can be significant:

There are subjects that I tell her to skip, such as subjects on holidays, Judaism, and Torah. It is not that I do not think that is important – it is very important. But it's not that if she skips it, she's missing something like English or math. It is something that is built layer by layer. I try very hard to assist her with that because even on the phone, it is very difficult for her. She does not always understand what is being said, is focused on what the teacher is saying, does not truly understand the assignments. Although they speak quite clearly, I can see that it is difficult for her. It is difficult for her personally. (Ruth, mother of six children)

Another aspect of the didactic challenge is related to age, with younger students experiencing greater difficulty in concentrating during telephone learning, especially asynchronous learning:

It can be used with adults due to lack of choice. [But] this kind of learning is impossible at a young age: a six-year-old girl needs a teacher right in front of her, even a 1st grade teacher can talk into the air. It's not just about teaching the material; you need the personal relationship with the students. (Rina, 1st grade teacher)

One argument that kept coming up for the interviewees was their disappointment that there was no attempt to combine telelearning with lesson worksheets. In their opinion, such a combination could have promoted concentration and learning effectiveness, as the printed page allows for a visual anchoring of the teacher's voice and enables higher participation:

Worksheets that accompany the lesson, with the ideas and questions that the rabbi actually prepares. A lesson page that he then goes through with the children ... that they have something in front of them! And the rabbi tells them, 'Do question 1 now' and not just talk and talk... that the child is challenged, that they're attentive, that they're listening, and not just lying in bed listening to the rabbi [...] something tangible in front of them, a notebook, with examples from the rabbi on the phone – that could have been much more effective. (Shoshana, mother of two children)

Didactic challenges: One-way communication and lack of feedback

One of the main disadvantages of phone-based learning is that the channel is one-way. With Zoom, feedback can be received from learners, albeit to a limited extent, whereas with telephone learning, not even this minimum is possible. Of course, this is also true for asynchronous learning through recorded lessons, but even with synchronous learning, the teacher's control is very limited. The teacher was not aware of what was happening with the student listening on the other end of the line: "He [the teacher] is just on the phone talking to himself ... He does not get whether they are listening or not, whether they know or not, sometimes they disconnect, and sometimes they just talk" (Meir, father of four children). Technically, the system did not allow the opening of an individual voice channel for each student but for the whole class at the same time. This option, which was usually added only during the second wave, resulted in background noise and ineffective clutter:

Everything was a mess, everyone is talking, all the time the kids are taking their turn, they are on silence. But one of them suddenly wants to say something, even though they don't hear him anymore. Everyone interrupts; in the end they just laugh ... and argue among themselves, "Rabbi, why don't you listen to me?". This and that and the other, they did not manage to listen that well. (Yitzhak, father of three children)

The ability to monitor student attendance in class was also limited. Some called out names at the beginning of synchronous classes – though this proved not to be easy – while in some of the communication systems, it was possible to obtain a computerized report on the participants in the class. However, it was, of course, not possible to track whether the student was actually present and listening

during the entire lesson. The problem was naturally even more serious for the asynchronous courses: “Even if my students missed a lesson, there was a gap that I could not know about” (Rina, 1st grade teacher).

These limitations prompted institutions to find creative ways to build a two-way relationship with students and receive pedagogical feedback. As mentioned earlier, in some phone systems, it was possible to leave reciprocal messages between teachers and students. In other schools, ‘activity rooms’ were opened in the language rooms via the telephone, where competitions such as cake baking were held, with photos of the work emailed to the school.

The challenge of parental involvement and the spatial challenge

Another instructional challenge was related to parental involvement, the burden placed on them by distance learning, and the difficulty of helping children learn ($M=2.87$, $SD=1.46$). Telephone audio instruction required the active presence of parents, sometimes even more than self-learning:

They [the children] cannot sit by themselves, and they do not know how to handle it on their own. They also do not have the patience to sit and listen to a half-hour recording of a lesson, so of course, everything just depends on the parents; it does not happen alone [...]. It’s not like now when I tell him, “Listen to the lesson!” Then, I can go and do my chores. If I sit with him and listen, then he’ll listen; if not, then not. (Yakov, father of two children)

Learning on the phone, especially asynchronous learning, requires the presence of the parents, who take the role of the teacher and make sure that the child is actually focused on learning and doing his homework. There were parents who said that if parents are recruited for distance learning in any case, it is better to invest more in learning together in the workbooks, without the teachers. Other parents compared learning by phone to learning by Zoom – in Zoom, the teacher watching the child can check or monitor the student’s presence in class, albeit to a limited extent. However, when listening to the recording or even in a synchronous phone call, the teacher has no knowledge of the child’s condition at all:

It is very difficult! And that’s why there is a father and a mother! And then the teachers tell me on the phone: “You don’t have to be there for everything.” Come on, you cannot! They do not understand! They don’t work on the phone! There is a very, very big lack of understanding; it truly kills me that teachers don’t understand that no matter how much they try to explain, they invest, they make an effort, they make a vocal effort, and still, it is impossible to understand - as long as they do not show things! Especially at a young age. They say in my daughter’s class: turn to page 174, look at the right side, and do they?! I don’t even know what is right and left! Then, the parents have to sit with her, and frustration sets in. (Naama, mother of four)

Another feature of telephone-based learning that came up in the interviews is the need for flexibility. There is difficulty in directing parents’ attention and the need to arrange the space at home to accommodate children’s parallel learning, as well as the use of equipment that is limited in number. Aside from the need for a parent to help several of their young children with their phones while distance learning, ultra-Orthodox residential characteristics also make this situation very difficult to navigate. This is because the number of siblings sharing a common room (sometimes four or more) leaves no space for quiet zones conducive to student focusing. Indeed, the questionnaires show that the density of residence (Chudi, 2016) makes it difficult for all the children in the home to find a quiet space to study ($M=2.87$, $SD=1.57$). Moreover, the use of phones by the children of the home – especially in families with many school-age children – forced parents to maximize flexibility. At this point, parents disagree about which of the options is better: synchronous or asynchronous learning by phone. Some said that the asynchronous system was better because of the flexibility in connecting times to the system:

Since it means he can call now and in another half hour the other son can call, there are not two lessons for the little one and the big one at the same time. Whenever they decide to call, they hear the lesson. If they are awake on average fourteen hours a day, they each have fourteen hours if they decide to take their half hour, which is very convenient. (Tammy, mother of three)

On the other hand, some argued that flexibility is also a disadvantage, and the recorded classes imply that “there is no order, no schedule; everyone comes when it suits them, an atmosphere of freedom” (Tzipi). The synchronous classes that take place at specific times help formulate a set daily routine that organizes learning at home and serves as an anchor during this chaotic time:

The absence of a routine is very important. There was no pressure to get up in the morning and no pressure to go to bed early. In addition, because classes are prerecorded, they are not online, and times are very loose. So, a girl who determined that the teacher recorded the lessons at night listened to them at night. They do it whenever they want. (Rebeka, mother of three)

DISCUSSION

The purpose of this article is to examine the telephone learning channel used in the ultra-Orthodox sector during COVID-19 and to present how parents, teachers, and administrators perceived its effectiveness and challenges. The results show that telephone language rooms were the main channel through which learning took place among the ultra-Orthodox public and that parent attitudes toward it were crucial. The effectiveness of telelearning is quite negative and ineffective, stemming from a number of challenges primarily related to the technology itself: technical challenges due to insufficient accessibility of terminal equipment and problems with the technical infrastructure of the telephone system. Other challenges were didactic in nature: incompatibility of the learning style with the abilities and character of some children (especially at a young age), and concentration difficulties (especially in subjects such as mathematics, English, and Hebrew). Additionally, the characteristics of the telephone system and its actual function as a one-way channel (even in synchronous learning) made it difficult to control the class and the interaction between teacher and students. Other challenges arose from the need for constant parental involvement in learning and the resulting strain, as well as from the context of the physical space in which learning takes place: a shared and crowded domestic space without the possibility of creating a quiet space where the student can concentrate. It was interesting to see that there is a certain gap in the negative way in which the interviewees described the telephone learning and the way in which it was described in the survey. This may be explained by the fact that many of the interviewees indicated that they felt there was no better learning channel adapted to the ultra-Orthodox lifestyle. It is possible that this sentiment explains the gap between the very negative image and the harsh criticism that emerges from the interviews and the quantitative data, which paint a softer picture.

The critical picture that emerges is drastically different from that presented in studies from approximately five decades ago, which portrayed learning on the phone in a positive light and emphasized its inherent potential (Olgren, 1997). It should be noted that this is not only related to the young age of learners in the current context but is primarily due to two factors: inability to take advantage of the unique benefits of telelearning and failure to recognize the conditions for its success, as expressed in earlier studies.

Researchers point to the advantages of telephone-based learning due to its technical simplicity and the availability and flexibility of using it (Moore & Thompson, 1990; Olgren, 1997). In the present context, these qualities stood in the way of young learners. The telephone connection was based on a complex and unreliable technical system, which hindered the flow of learning. Additionally, the advantages of availability and flexibility were not reflected due to the complex learning context: the learner was not alone as the learner had to coordinate the use of the phone in a family where there

was usually no phone for each member of the household, and sometimes only two phones, a land-line, and a cell phone, were available for each of the children. The cramped domestic space in the average ultra-Orthodox family also affected the flexibility possible in other contexts, such as learning by phone from the learner's home.

Research collected in the 1980s and 1990s identifies several additional conditions that, when met, increase the effectiveness of telelearning (Anderson & Garrison, 1995; Fowler & Wackerbarth, 1980; Garrison, 1990). The first condition recommends investing in the interactive function of learning by telephone and engaging students in active learning through discussion, questions and answers, and the like. In practice, parents and teachers testified that these attempts were doomed to failure. No such interaction occurred at all in the asynchronous telephone channel, and one might think that a "gain" in flexibility in offline learning led to a "loss" in interactivity. However, the results show that, even in synchronous learning, no effective interactive communication was possible. It seems that this is due not only to the characteristics of the telephone system but also to the fact that no defined norms and rules of behavior emerged in telephone learning (also cited in previous studies as a condition for success) since the transition to this channel was rapid and lacked preparation, with no time for adaptation. Another condition cited in previous studies is the presence of printed learning materials to accompany audio learning and compensate for the absence of the visual dimension. The results show that printed learning materials were indeed used and that parents rated their effectiveness highly, but there was no synchronization between these materials and telephone learning, which occurred without visual support. The lack of synchronization impaired the quality of attention and concentration and increased the degree of learning fatigue (Ostendorf, 1989).

Other didactic conditions include precise planning and early design of telelearning spaces. It is impossible to ignore the objective difficulties associated with the cramped space in the homes of ultra-Orthodox families and the presence of several students who need the help of their parents and a quiet learning space. The results show that the didactic strategies mentioned were not implemented in telephone learning, and it seems that, again, the reason lies in the lack of awareness and preparation for how learning should be adapted to the telephone space. The issue of feedback is also critical, as parent comments indicate a lack of dialog with teachers and school administrators to resolve the challenges of telephonic learning and adapt to 'field conditions.' This finding supports the argument of Barrett (2022), who identifies one of the challenges of telelearning as a result of the relationship between the school and parents in ultra-Orthodox society, which is characterized by distance. According to her, although the coronavirus period required parents to be more involved in their children's learning and strengthened their appreciation for educational institutions in recognition of efforts to adapt learning to the new conditions, the results of the current study show that parent-school relationships must also include rich feedback that actively influences the design of the characteristics of actual learning.

In summarizing these findings, it can be seen that they support Reid and Champness's (1983) recommendation for organizational convergence that combines the activation of technological, content, and communication factors. Based on the success of a telelearning program they analyzed, they argue that the organizational factor is most critical to the success or failure of the program. In our case, according to the teachers and administrators, the institutional organization in the conversion to distance learning in the ultra-Orthodox education system focused on supporting the technological aspect while neglecting the adaptation of the content and the communication space.

FUTURE IMPROVEMENT MEASURES

Based on the research results, to meet the challenges of a future pandemic or similarly disruptive crisis, telelearning spaces must be improved significantly according to several parameters: steps must be taken to distribute or loan additional phones to each family and to improve technological capabilities to support the infrastructure of such networks; rules of conduct and etiquette for synchronous clas-

ses must be established in advance and practiced with students to allow for a combination of interactive activity and student participation; lesson plans must be created in advance that combine audio learning spaces simultaneously with additional learning opportunities, such as worksheets that visually anchor what is learned and improve concentration and assimilation of the material or the use of books and study notebooks in the hands of students; additional visual learning tools that are not connected to the Internet, such as tablets, should be allowed; and visual learning materials should be embedded in them, such as presentations accompanied by voice recordings and videos by teachers who are able to do so. Follow-up studies should examine the parental challenges in such a process, not only in terms of supporting children but also in terms of the impact on the division of gender roles at home, for in ultra-Orthodox society, the mother is traditionally the one who bears the burden of raising children, and the mother is the one who is more present at home (Neriya-Ben Shahar, 2017). the skills needed to provide support in this regard, and the degree of guidance and direction needed by parents to implement distance learning.

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