More and more institutions are focusing on providing their faculty with technological training to deliver distance education. However, effective pedagogical practices for distance education are hinged to students' perceptions. The primary purpose of this study is to determine the influence of some demographic factors on the students' perception of distance education and the impact of students' perception on distance education in relation to their programme at a research university in Turkey. The study was conducted using a survey research design. The survey was distributed to the students who receive distance education from different departments from a vocational high school. A total of 621 students were interviewed randomly and mixed method approach was used to analyse the results. Research outcome reveals that the type of education, as well as the department to which students belong, bear significant influence on their perception of distance education, while participants' gender and age have insignificant influence. Moreover, results demonstrate that there is a positive relationship between the students' perception of distance education and the students' programme. The results offer data for consideration on how distance education in Turkey could be further developed.

Keywords: distance education, educational programmes, online learning, student experience, student perception
Today's young people are nearly earning a salary as the same as generation at the same point in their life. However, the difference is that young employees with associated degree can earn more than previous generations while those young employees who do not have an associated degree are earning less than the previous generation. Studies suggest that having a degree is important and potentially leads to a higher earning potential (Supiano, 2014). Aside from the possibility of increased income, the impact of having degree can include the areas of occupational prestige and status. A degree may give them more opportunities for a better position in employment leading to more occupational status and improved social environment (Lee & Staff, 2017).

Today's young people want to learn in a very short time. So, time is very important for them. In other words, time has become an important consideration for students, and it is difficult to spend the amount of time necessary to succeed in a university environment (Hanson, Drumheller, Mallard, Mckee, & Schlegel, 2011). Young people can connect in different ways, through mobile phones, computers, tablets and other electronic devices. They spend a considerable amount of time using these gadgets so it is hard to convince these young people to study in traditional manner at a university. Moreover, balancing the demands of studying, working and other activities is primarily a challenge for today's young people. Aside from this, motivation, family responsibilities, financial difficulties, among others prevent these students from attending normal education (Teran, 2007). Students have explored opportunities of distance education and try to overcome these impediments.

Distance education

There are many common terms used to define distance education. As Qayyum & Zawacki-Richter, explains that these terms include e-learning, distance learning, open learning, online learning and flexible learning. But in this study, the term distance education will be used. Distance education is a kind of an instruction where the learners and the teachers are physically separated from each other (Guri-Rosenblit, 2005).

Keegan (1980) states that distance education is a specific form of teaching and learning (which is regarded as a form of complete programme) delivered beyond the traditional form of programme offerings. Distance education is the transmission of education or self-instructional programme to individuals or groups (Reiser, 2001). Meanwhile, Ozad and Barkan (2004,) imply that distance education is based on a pre-produced course that is self-instructional. Since the past several years, distance education has become more and more widespread around the world. Distance education dates backs to in 1873 in the United States (Wang & Liu, 2003). But after 2000s most of universities have begun using distance education and online courses (Stella & Gnanam, 2004). The numbers of distance education have been getting increased since that time.

In Turkey distance education started in 1923 but mainly as a proposed concept. Bozkurt (2017) states that there are four periods in distance education system in Turkey; these are: (1) Discussion and suggestions: Conceptual from 1923–1955; (2) Period correspondence through letters, from 1956–1975; (3) Audio-visual through radio and television, from 1976–995; and, (4) Information-based through internet (1996–onwards), which also included learning from blogs (Relojo, 2017).

In 1996 distance education system was applied in Middle East Technical University primarily. Since then most of universities have applied to take advantage of distance education. The numbers of distance education programmes have increased.

Due to work, having family responsibilities and limited time, students may benefit from distance education. As Guri-Rosenblit (2005) states that less time they need to spend comparing to traditional education. Moreover, instead of traveling to campus, to stay at home or to use an internet cafe will be
easier for them. Thus, they may access more classes and they may have opportunities in independent learning. This mode of education allows for flexibility to students who are not able to attend classes regularly on campus (Tricker, Rangecroft, Long, & Gilroy, 2001). Distance education provides advantages not only for students but for university as well. It increased university enrolment and revenue too. As Milheim (2001) stated that it would have a great potential for financial return as well as having the potential to become a more integral part of instruction.

Objectives

The aim of this research is to determine the influence of some demographic characteristic on perception of distance education in a vocational high school in Turkey. The following objectives were used in conducting this research: (1) Characterise Ahmetli Vocational High School in Manisa, Turkey according to age, gender, department, academic performance; (2) Determine the perceptions of distance education among the departments including office management, accounting and finance, banking and insurance, and hotel and restaurant management; (3) Compare distance education with traditional face-to-face delivery of instruction; and (4) Determine the impact of the perceptions of distance education on academic success by testing a model.

One of the target outcomes of this research is the university might start to explore the ways to address the interests and concerns of students to expand course offerings using distance education as an instruction. Additionally, this research may reveal specific concerns regarding distance education as perceived by. Such concerns and interests identified by students may later on be used as a guide to the managers of the school to help in the planning effective implementation of distance education programmes. The results of the research may offer to school in-service and individual professional development opportunities with some effective school evaluation methods.

RELATED LITERATURES

Over the time, education has undergone numerous changes with regard to delivery. One of these changes is technological advancement delivering instruction by distance education (Ponzurick, France, & Logar, 2000). This kind of education let students learn without going to campus. Moreover, distance education has begun to be applied in many different organisations. By being more commonplace, educational institutions also tried to change their educational system and format (Charr-Chellman, 2000). Students should always and in everywhere be able to communicate with the school for academic and administrative support (Lim, Fadzil, & Mansor, 2011). It is clearly stated that academic and administrative support forms in universities utilising distance education and learning support forms the basis of support for the implementation of distance education (Ng, 2018). Support in relation to all aspects of teaching and learning enhances communication, adding increased flexibility in the delivering of distance education programmes (Bingimlas, 2009).

Cantor (2017) studied on technological developments on vocational education and applications and stated that student should be more interactive and use technology and technological devices in order to improve their accounting abilities. Digital education applications and technological devises should be used more and more for increasing the quality of education (Hacirustemoglu, 2009; Yucel, Sarac, & Cabuk, 2012). In turn, this improved development in education such as reading abilities of students (Relojo, dela Rosa, & Pilao, 2016.)

Distance education can motivate students, and while being motivated, students can improve their academic performance (Bautista, Relojo, Pilao, Tubon, & Andal, 2018). As Karacaer and Tas (2004) explained that motivation is the key for improving academic success and performance. The rapid spread and developments in information technology, has led to some changes in education system. These
challenges warrant that the competency level of students should be improved and distance education helps students prepare for facing and dealing with the challenges of the new education system. Mohamed and Lashine (2003) stated that students need to improve their skills and abilities by using technology, laboratory and web-based education to overcome these challenges. Firat, Kilinc, & Yuzer (2018) explained the levels of natural motivation triggers and explored how to maintain the interest of distance education students with regards to learning individually in e-learning environment. They studied on distance education and reached some results showed that the level of intrinsic motivation of distance education students is high in e-learning environments, but there is no statistically significant difference by gender and programme.

Another study (Da Costa, Pelissari, & Gonzalez, 2018) identified some factors associated with perceptions of the public higher education institutions' image from the perspective of distance education students and studied on those factors. They concluded that the amount of time that a member of the public interacts with an organisation does not affect his perception of that organisation's image. Vogel and colleagues (2018) examined the reasons why students left from school by content analysis method with interview and they suggest that providing students a flexible learning environment adapting their needs and demands on structure, dialogue and autonomy.

METHODOLOGY

The participants are students of Ahmetli Vocational High School. A total of 621 students out of 2,000 students in this school were interviewed randomly for analysis. A questionnaire was used to collect data from students. Descriptive statistics about sample can be seen on Table 1.

Table 1
Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>18–20</td>
<td>278</td>
<td>44.8</td>
</tr>
<tr>
<td></td>
<td>21–23</td>
<td>283</td>
<td>45.6</td>
</tr>
<tr>
<td></td>
<td>24–26</td>
<td>26</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>27 and over</td>
<td>34</td>
<td>5.5</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>425</td>
<td>68.4</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>196</td>
<td>31.6</td>
</tr>
<tr>
<td>Education received</td>
<td>Formal education</td>
<td>336</td>
<td>54.1</td>
</tr>
<tr>
<td></td>
<td>Evening education</td>
<td>201</td>
<td>32.4</td>
</tr>
<tr>
<td></td>
<td>Distance education</td>
<td>84</td>
<td>13.5</td>
</tr>
<tr>
<td>Department</td>
<td>Banking and finance</td>
<td>105</td>
<td>16.9</td>
</tr>
<tr>
<td></td>
<td>Office management</td>
<td>204</td>
<td>32.9</td>
</tr>
<tr>
<td></td>
<td>Accountancy</td>
<td>140</td>
<td>22.5</td>
</tr>
<tr>
<td></td>
<td>Hotel and restaurant management</td>
<td>172</td>
<td>22.7</td>
</tr>
</tbody>
</table>

Instrument

The study used a questionnaire adapted from Liaw, Huang, & Chen (2007); O'Donnell & Sharp, 2012; and Richardson, P., Dellaportas, Perera, Richardson, B. (2013). These were translated into Turkish by Sigali,
S., Akgul E.F., & Durak, M.G (2017) and validity and reliability of the questionnaire was tested. A five-point Likert scale was used (1: strongly agree, 2: agree; 3: neutral; 4: disagree; and 5: strongly disagree).

Data analysis

All data collected using the questionnaires were analysed. Quantitative analysis method was used to analyse the data collected using SPPSS 21 and AMOS 16. All the mean of all variables and standard deviations were computed. Test of normality was carried out using skewness-kurtosis. A reliability analysis was carried out on the perceived task values scale comprising 8 items. Cronbach’s alpha showed the questionnaire to reach acceptable reliability, \( \alpha = 0.910 \).

RESULTS

Descriptive statistics according to the participants’ type of education received along with their perception of distance education were computed.

<table>
<thead>
<tr>
<th>Type of Education</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SE</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal education</td>
<td>336</td>
<td>2.61</td>
<td>.56</td>
<td>.03</td>
<td>2.55</td>
<td>2.67</td>
<td>1.32</td>
<td>4.26</td>
</tr>
<tr>
<td>Evening education</td>
<td>201</td>
<td>2.65</td>
<td>.55</td>
<td>.04</td>
<td>2.57</td>
<td>2.72</td>
<td>1.32</td>
<td>4.45</td>
</tr>
<tr>
<td>Distance education</td>
<td>84</td>
<td>2.32</td>
<td>.48</td>
<td>.48</td>
<td>2.22</td>
<td>2.43</td>
<td>1.32</td>
<td>3.45</td>
</tr>
<tr>
<td>Total</td>
<td>621</td>
<td>2.58</td>
<td>.56</td>
<td>.56</td>
<td>2.54</td>
<td>2.63</td>
<td>1.32</td>
<td>4.45</td>
</tr>
</tbody>
</table>

T-test results on Table 3 show that students’ perception of distance education is insignificant according to gender.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SE</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>425</td>
<td>2.59</td>
<td>.56</td>
<td>.03</td>
<td>.662</td>
</tr>
<tr>
<td>Female</td>
<td>196</td>
<td>2.57</td>
<td>.55</td>
<td>.04</td>
<td>.661</td>
</tr>
</tbody>
</table>

Results further reveals that students’ perception of distance education is insignificant in terms of the type of education they received (\( F = 11.04, \ p < 0.001 \)); insignificant in terms of their age (\( F = 1.78, \ p > 0.05 \)); insignificant in department they study (\( F = 10.84, \ p < 0.001 \)).
DISCUSSION AND CONCLUSION

The aim of this research is to find the relationship between students' perception of distance education and their diploma degree. Another aim is also to identify the influence of some demographic characteristics on students' perception of distance education. There are limited literatures on this subject. First, gender and age had no significant effect on students' perception of distance education. Researches done by Ho (2005) supported these results. Moreover, the results from the ANOVA indicated that education type of participants and the department participants belong to have a significant effect on students' perception of distance education. This result was consistent with the findings by Koohang and Durante (2003) which reveal that distance learners have more positive attitudes toward distance learning.

Meanwhile, as Schermelleh-Engel, Moosbrugger and Muller (2003) demonstrated by discussing different goodness-of-fit indices, if various measures of model fit point to conflicting conclusions about the extent to which the model matches the observed data, it is so difficult to decide on data-model fit or misfit. But as they claimed that there are some rules of thumb that an overview over some rule of thumb criteria for goodness-of-fit indices.

Finally, we can say that students' perception of distance education is affected by department they studying and the type of education they received but is not affected by gender and ages of students. Furthermore students' perception of distance education impacts their diploma degrees which show their success in school.

This research has a number of limitations. First, although there was large number of participants, they all come from the same institution. Future research could involve other institutions. In this research the relationship of students' perception of distance education and some demographic characteristics are tested aside from the impact of students' perception of distance education on students' diploma degree, however, but the impact of some other variables can be looked into for future studies.

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