

# EDUCATIONAL AND TRAINING IMPERATIVES FOR FUTURE TOURISM COMPETENCIES: THE CASE OF SLOVENIA

## Pre Proof Accepted Paper

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### Abstract.

**BACKGROUND:** Research has long shown that there is a need for better training in tourism, however previous research focused mostly on perception of management with regards to the need for future tourism competences while the perception of employees in general has not been properly investigated.

**OBJECTIVE:** This paper identifies the perceptions of tourism employees regarding the future competences needed in the sector. These competencies are the basis on which to focus the development of study programs and education programs.

**METHODS:** Based on a survey questionnaire we analysed the attitudes of 226 tourism employees regarding the competencies they estimate they will need in the future.

**RESULTS:** The most important set of competencies according to employees' perceptions will be a high degree of hospitality, the ability to work with people, stakeholder cooperation and emotional intelligence. Judged to be the least important, on the other hand, is the digital literacy thus showing that the employees expect tourism to continue to be primarily a "human touch" industry. We found statistically significant differences in the respondents' assessments in relation to their education, hierarchical position, age, and field of work in tourism, but not gender.

**CONCLUSIONS:** The findings have an applied value for the curriculum developers of tourism study programs at all levels of education, as well as for employee trainings. Findings also provide important aspects regarding the needs for future research.

Keywords: tourism, future competencies, study programs, training, education

## 1. Introduction

Through 2019, tourism has seen significant growth worldwide. Much of this can be attributed to relatively stable growth in the overall economy, technological advances, new business models, and a more liberal approach to crossing borders and obtaining the necessary visa documents. COVID-19, however, brought an unexpected random shock [1, 2], a sudden stagnation in the global society and economy, a significant disruption of economic activity, and a long-term damage to the labor market [3]. Given the current development of tourism and the recent pandemic developments, the tourism sector expects major challenges in the near future. The labor-intensive accommodation and food services subsectors employ 144 million workers worldwide. This includes approximately 44 million own-account workers and 7 million employers. Most tourism businesses enterprises are micro, small and medium-sized enterprises (MSME) of less than 50 employees. About 30 percent of the total workforce is employed in enterprises with 2-9 employees. [4].

As the pandemic measures are slowly phasing out in Europe, the most important consequence seems to be lack of tourism workforce to successfully deal with the again rising demand. One of the important measures of the future is to develop education and training programs that would increase the competitiveness of tourism workers in the labor market and increase their employment and employability but also satisfaction [4]. With the resurgence of tourism, it is time to focus on education and training needs to ensure they remain current and relevant to the future workforce.

For this purpose, a number of initiatives have already occurred. For example, countries such as Portugal, Barbados, Singapore and Chile have provided training and capacity building for tourism workers during the lockdown through free or subsidized online courses. The Chilean SIGO program provides technical assistance in business and digital management processes for tourism entrepreneurs and is being adapted to addresses the particular challenges of the emergency and the post-crisis reactivation process [5]. The Thailand government launched skills development programs for self-employed workers [6]. Many public and private tourism agencies are also organizing training webinars to promote information technology (IT) and digital skills, entrepreneurship, and digital marketing, among other themes (Chile, Colombia, Costa Rica). The Guyana Tourism Authority and the Tourism and Hospitality Association of Guyana signed an agreement for the development of an industry database and the enhancement of training and capacity building initiatives for sector members. Other countries are developing incentive packages for businesses to adjust and reinvent themselves to adopt new business models involving different customers. UNWTO Tourism Academy has developed (free) online training materials for businesses and workers [7].

According to a study for the World Travel & Tourism Council [6], global tourism, with extremely high growth, was facing increasing difficulties in finding a skilled workforce, as 37 of the 46 countries surveyed showed a shortage of workforce within tourism. This situation is not new,

however the pace and extent of change is significant. The nature and status of work in tourism is changing radically and rapidly due to wider socio-cultural and economic changes, such as the globalization of industry (including the phenomenon of cheap migrant labor) and the trend of labor flexibility, the impact of technology on the nature of work and skills from purely technical skills to an emphasis on emotional work and other skills traditionally associated with other areas of employment [8]. This has been compounded by the global pandemic and its aftermath aggravating the needs for skilled workforce.

Digitalization is amongst the most important trends that will dictate the further development of workers in tourism industry, developing hand in hand with automation. From autonomous vehicles to automated cleaning and automated receptions, tourism is becoming one of the central areas of automation, mainly in the direction of reducing labor costs towards increasing self-sufficiency [9, 10], which will primarily affect lower paid jobs. According to some gloomy forecasts (example: [11]) we are on the verge of a new mass extinction of services, which with the development of artificial intelligence affects not only lower paid jobs but mainly related services such as analytics and "white collar" services [12].

While previous research focused mostly on employers or expert opinions regarding the training needs the position of employees has been largely neglected even though we postulate here that it is (a) made on the basis of employees' first-hand experiences, thus having especially important value, and (b) are a highly important factor in workers' decisions with regards for their future competence training. Therefore, the purpose and goal of the research is to systematically identify the competency needs as identified by Slovenian tourism employees and provide recommendations for new competencies for the future of tourism from the perception of employees, compared to management.

## **2. The competencies gap and drivers of change**

Graduates adequately assess and define the skills and competencies required for quality in tourism, which is critical for competitiveness [13]. The fundamental purpose of quality education in tourism and hospitality is providing the tourism industry with an appropriately skilled workforce [14]. In this regard, it is important that tourism education provides graduates with the competencies and skills required by the tourism industry [15]. If the curriculum is designed only from an academic perspective, there is a risk that it will not include content that is important for the tourism sector, which is constantly changing and developing [16]. There is a broad consensus among scholars and practitioners that the hospitality and tourism curriculums need to include important leadership and management competencies to produce more productive and effective graduates in theory and practice [17]. Criticism of the learning outcomes of higher education in the management literature remains a global trend [18]. Hospitality and tourism faculties generally

consider the experience and needs of the hospitality and tourism industry and combine it with knowledge from other related components [19].

For a long time, the research shows a gap in the competences offered by tourism curricula on the one hand, and the necessary competences for work as perceived by employers [20]. The central problem of tourism education is the disconnect between the tourism industry and tourism education, as they each have their own performance criteria [21]. Tourism as an industry poses great challenges for education since it is characterized by the fragmentation of tourism into different fields and thus reflects the need for highly diverse knowledge. Additionally, this diversity of knowledge is underestimated in the industry itself, reflected in the excessive need for staff with lower levels of education. Baum [8] argues that tourism, like other sectors of the economy, suffers from a deficit of leadership skills. He continues that changes in tourism have led to significant changes in the complexity of work, so today employees in tourism need more knowledge and understanding in the field of marketing, social networks, cultural diversity, foreign languages, use of modern technologies and environmental responsibility. Demanding work with inflexible schedules and the characteristic of seasonal work further reduces the motivation of young people for a career in tourism.

First discussions of COVID-19 consequences on tourism education focused on the ways tourism higher education coped with lockdowns and shifts to online classes, negatively affecting primarily the practical components of tourism education, such as internships and field trips [22] and the need for crisis management including amongst other also psychological counselling and financial support for students and staff in need [30]. Others focused on future negative effects the pandemic will have on student enrolment [23], exacerbating the longer negative trend [24] and affecting tourism students career anxiety [25]. However, [26] show that amongst the interviewed students the disruption induced by COVID-19 predominantly strengthened students' commitment to their previously selected career since their hope for using their degree for a lasting difference to redesign tourism for the better overrode initial doubt and anxiety. As a result, students held predominantly optimistic attitudes towards future tourism careers and perceived a potentially higher future value of a tertiary tourism degree. Similar hopes are echoed in the current discussions of the need for using the pandemic for a redesign of not only tourism, but also tourism education towards either more sustainable and critical leadership necessary for the redesign of the post-pandemic tourism [23, 27, 28]. On the other hand, some authors stay within the realm of the traditional tourism skills, proposing higher education to focus more on crisis management and safety, skills that will aid students to find their niche via more focus on innovation and creativity, extended connection with the industry and even more diverse skills [29, 30].

Already in 2018, the OECD, based on the analysis of the needs of the tourism industry, concluded that digitalization would be the most important competence of employees in tourism in the future. Tourism companies need help to improve the digital skills of employees to facilitate interaction

with potential customers and take advantage of e-commerce, booking platforms and social networks. According to the OECD, 27% of millennials and 36% of the generation Z publish information about the planned trip on social networks in order to obtain the opinions of others before making a final reservation [32]. Organizations have to face a more rapidly changing environment than ever before. The development of science and technology provides new knowledge opportunities that bring the effectiveness and efficiency of organizations' activities [33]. The use of technology has become an integral and indispensable part of the educational and academic activities particularly amid the COVID-19 pandemic at present [34].

UN WTO (2019) provided expert opinion that in the future it will be critical for professionals to develop their skills continuously, with special relevance in those less automated or more complex skills, such as problem solving, analytical skills, critical thinking, creativity, management and coordination of people, emotional intelligence or cognitive flexibility [35].

At the EU level, a 2016 study [36] identified key areas of competences for European tourism of the future. The first area refers to the "basic" competences for tourism, which include social / soft skills needed to work with guests (knowledge of foreign languages, service delivery and service quality, intercultural awareness, and communication skills), problem solving skills, entrepreneurship, finance, and digital competences, as digital reservations and online marketing are becoming increasingly important. Finally, the report stresses that due to the size of the accessible tourism market and the aging population increase the need for competences related to accessible tourism is also growing.

The necessary competencies identified by the industry are mostly focused on needed competences for (future) managers and higher level professionals and can be divided into two main groups: leadership competencies and interpersonal communication competencies [37]. [38] identified four areas of competencies for education in tourism: destination management competencies; political and ethical competences; improved human resource management skills and dynamic business skills. Primarily, they stressed the value-based tourism education paradigm as the most important direction of the future of tourism education, guided by the values of cultural diversity, ethics, and inclusion, creativity and self-actualization, experiential learning, critical thinking, emotional intelligence, openness, and optimism. Focusing on opinions of employers [39] identified four groups of competences needed by the industry: (a) professional competencies: competencies specific to the profession, (b) methodological competencies: generic problem-solving and decision-making competencies, (c) social competences: optimal functioning in a social environment, including cooperation, interaction and building effective relationships, and (d) leadership competences: the ability to motivate and inspire others to share a vision and encourage work. [40] identified five most important generic competences: fast learning, efficient use of time, teamwork, clear expression and use of information technology. [41] tested the Malaysian tourism industry's response to the importance of as many as 40 competencies and identified technology

capability, teamwork, self-initiative, reliability, customer service, interpersonal skills, flexibility, integrity, and communication skills among the top ten.

While most of the research focus is on managers, [42] compared the views of tourism managers with the views of tertiary tourism graduate employees. She concluded that both tourism graduate employees and managers placed a very high evaluation of the perceived skills and competencies as relevant to provision of quality tourism services thus confirming the high diversity of necessary skills and competences. The difference though is that tertiary tourism employees place them even higher than tourism managers. The author ascribes this to the fact that the analyzed employees have gone through the tertiary tourism education system; thus, they are better informed when it comes to the skills and competencies relevant to the provision of service quality in the tourism industry. This research thus points to the important question of the role of education in workers' perception of future competences needed in the tourism industry. The role of education has also been shown in research amongst hotel and tourism managers. The results [43] showed that there were significant differences in the assessment of the importance of basic competences among the respondents according to their level of education. Respondents with a higher level of education attached greater importance to all five basic competencies than respondents with a lower level of education.

In the study compared the views of managers with the views of employees and high school and university students and identified a mismatch in their perceptions. The managers not surprisingly placed a strong emphasis on obeying supervisors and customer service mind-set. The employees' and university students' perceptions of the importance of the competencies were similar, they mostly valued work ethic, ability and willingness to learn, initiative, customer service orientation and obeying supervisors more than college and high school students did, whereas the latter especially valued "spoken communication," "computer literacy" and "analytical thinking" more than other three groups [44].

Although there is scarce literature with regards on the role of workers' age and length of tourism experience in the perception of the necessary competences among tourism employees, if we again follow research made with managers, there are indications that age indeed might play an important role. [43] found that there are significant differences in the perceptions of competency importance as compared to actual competency development between hotel managers according to age. Younger managers (aged 20-30) perceived the competence categories 'leadership', 'financial analysis', 'management of human resources' and 'communication with human relations' to be more important than other older respondents. Younger respondents also placed a higher value on cultural diversity, interpersonal communication, and soft competencies. Similar results are shown by [45] who focused on the role of age amongst young general managers' in their perception of leadership competency. Their results show that younger hotel general managers (aged 25–34) placed a higher value than older general managers on concern for community, communication skills, team-

building and ethics, motivation/interpersonal skills, and leadership than older general managers (aged 45-54). There is, however, as pointed out earlier, lack of research on the role of age amongst tourism workers and not only managers or management trainees.

Work experience is in generally recognized as having highly important role. The value of human capital represents roughly two-thirds of an individual's total wealth and that skills acquired or deployed through work experience contribute an average of 46 percent of this value over a typical working life[46]. However, to our knowledge, there is no research showing the role of work experience in tourism employee's perceptions of the competencies needed for the future of the tourism industry.

Finally, there is scarce information on the role of gender on perception of necessary competences in tourism industry. Here we can again only follow the research made with managers. Male respondents perceive human resource management competencies as more important than do female respondents and ascribe this to the gender gap: because male respondents occupied more managerial positions within the hospitality industry, compared with the female respondents, the male respondents are supposed to value the same competencies more [43]. On the other hand, in a study in which the authors assessed the skills of new tourism employees and compared them to the skills expected by tourism employers, it was found that female employers place more emphasis on social and interpersonal skills compared to male employers [47].

### **3. Research problem and methodology**

A precondition for the development of tourism is a continuous increase in the level of knowledge and competencies of those who directly provide services in tourism. It is unlikely that poorly educated workers in tourism with outdated or inappropriate competencies will be able to offer a demanding visitor an experience at a suitably high level. This raises the fundamental question of identifying the competencies that workers in tourism need, taking into account the dynamics of change. The research question presented here is: What are the needed competencies for the future as perceived by employees in tourism in Slovenia and how does this differ according to their education, position in the organization, field of work in tourism, age, length of service within the organization, and gender?

Analysing the differences based on factors that include one's position within organisational hierarchy (position in the organization, education, length of service within the organization) sheds light on the areas of significant differences between the different levels of management and experience with regards to necessary competencies, potentially identifying any mismatches between the management and the workers' perceptions and identifying the role of education in the perception of needs for future competencies. We have focused on continuous training and competencies that employees have received through that. Furthermore, analysing the differences

according to one's field of work sheds light on significant differences within the highly diverse areas of the tourism industry. Finally, since tourism industry is struggling with issues such as the generational gap, ageism, and gender equality, it is important to see whether there are any differences according to age and gender of respondents. Additionally, the demographic information serves for better segmentation and tailoring of future tourism education.

For the needs of the research, we prepared a survey questionnaire, based on which we analysed the perception of importance employees in an individual profession with regards to the competencies that employees estimate will be needed for the tourism of the future. The first part of the questionnaire contains the statements we based on the findings obtained together with the co-authors of the CRP TUR-KOM project by conducting focus groups and analysis conducted in connection with educational programs in the Republic of Slovenia [39]. The second part of the questionnaire presents the demographic data we collected about the employees we surveyed.

Indicators for perception of future needed competences in the industry were derived on the basis of results of previous research within the same research CRP TUR-KOM project. We performed focus groups amongst representatives of tourism organisations (mixed levels of hierarchy, but there were more management level representatives than other levels) [48]. Four such focus groups were made, each including approx. 4 to 6 representatives of four areas of tourism: accommodation, catering, tour operators/tourism agencies, and destination management. Additionally, representatives of events and experiences were individually interviewed due to logistical issues with setting up the focus group. Altogether, there were 23 participants of this qualitative research. Their answers with regards to future competences needed were analysed and categorised in five main areas of competences which were then used in hereby presented survey amongst tourism workers, asking them to rate the importance of these five sets of skills for the future of tourism by ranking them from most important (value 5) to least important (value 1): (a) high degree of hospitality, ability to work with people, cooperation, and emotional intelligence, (b) digital literacy, (c) creativity and innovation in the design of 5\* tourism products, (d) passion and commitment to hard work, (e) adaptability and flexibility with a constant willingness to learn (see Table 2 for distribution analysis). The five areas are in line with other similar research on the competences in the tourism and hospitality field described above, although sometimes worded with other yet terms.

As respondents, we included a random sample of employees in five selected sub-segments of the tourism, hotel management and events industry: hotel management, catering, travel agencies, experiences in tourism and organizations that perform destination management roles. Our sample included randomly selected companies asking them to forward our survey to as many employees as possible with a goal of reaching 1000 random employees to whom the link to the online survey questionnaire on the 1ka.si website was send or the same version of paper survey was offered. Survey took place from mid-January to mid-February 2020. 226 people responded to the survey,



which represents a 22.6% response rate among those included in the sample. Assuming the possibility of an error of 6.5%, the collected data can also be generalized to the entire population defined in the survey.

The adequacy of the sample is strengthened compared to the population through the calculation of a one-sided t-test, which showed a value of -1,507 for the value of age and a value of  $p = 0.133$ , which means that the sample is comparable to the population in this [49]. We also tested the gender variable with the chi-square ( $\chi^2$ ) test, which showed a value of 0.263 and a significance of  $p = 0.608$ . For variables with one level of freedom (in our case, the variable gender), the values of the chi-square of the distribution are 3.8415, at  $p = 0.05$  [50]. In our case, the chi-square is less than 3.8415, the significance  $p =$  greater than 0.05. Due to the above, we can say that the sample is comparable with the population and the results are generalized to the entire population. We also performed the Cronbach Alpha test, which showed values for individual sets in the range between 0.818 and 0.957, which represents a good (values between 0.800 and 0.899) or excellent (values above 0.900) internal consistency of the measured [51].

In the first part of analysis, we decided to look closely to our sample and its demographics, results are presented in Table 1.

*Table 1*

Looking at the most basic demographics we can see that among the respondents, we had 71 (33.8%) men and 134 (63.8%) women, while 5 (2.4%) respondents chose the option not to disclose their gender. The average age of the respondents was calculated at 41.01 years, with a total of 17.55 years of working experience, out of which 8.77 years in the current job. Most of the respondents were employees within a unit (53.2%), about a third were head of a unit (30.7%), one tenth were managers (9.8%) and a small percentage also self-employed (6.3%). Table 1 shows further details.

#### **4. Results**

The following is an analysis of descriptive statistics for all measurable variables that demonstrate the key competences for tourism of the future. We first performed basic descriptive statistics, finding that the responses were not normally distributed, so we then used nonparametric tests for the entire analysis.

*Table 2*

In Table 2. respondents estimate that the most important for tourism of the future will be a high degree of hospitality, ability to work with people, cooperation, and emotional intelligence (mean

value 3.68), followed by adaptability and flexibility with a constant willingness to learn (mean value 3.38), passion and commitment to hard work (mean value 3.11), creativity and innovation in the design of 5\* tourism products (2.52) and finally, the participants overall judge as the least important for the future the digital literacy (mean value 2.34).

The second set of comparisons refers to the five identified sets of knowledge, skills and abilities that will be needed for future tourism and demographic variables.

### *Table 3*

For the role of education in ascribed importance to tourism skills of the future Table 3 shows that statistical differences according to the level of education occur in four of the five sets of competences. Such a statistically significant difference ( $H = 11.391$ ,  $p = 0.044$ ) is observed in passion and commitment to hard work, where the highest value is shown by the group of those with primary education or less (average rank 135.50), and the lowest by the group of those with postgraduate education (middle rank 83.26). The variable high level of hospitality, ability to work with people, cooperation and emotional intelligence also shows a statistically significant difference ( $H = 17.207$ ,  $p = 0.004$ ), where the group of those with postgraduate education shows a distinctly highest value (average rank 121.47), and the lowest group of those with primary education or less (middle rank 47.17). The variable digital literacy also has a statistically significant difference ( $H = 19.894$ ,  $p = 0.001$ ), where the group of those with primary education or less (average rank 160.25) shows the highest value, and the group of those with postgraduate education shows the lowest rank (88.61). The variable quality and innovation in the design of 5\* tourism products also shows a statistically significant difference ( $H = 15.262$ ,  $p = 0.009$ ), where the highest value is shown by the group of those with university education (average rank 111.90), the lowest and a group of those with primary education or less (middle rank 43.33).

### *Table 4*

For hierarchical position within organisation, Table 4 shows that statistically significant differences are shown for two sets of competences. Thus, a statistically significant difference ( $H = 14.407$ ,  $p = 0.002$ ) was shown for the set of competences including high level of hospitality, ability to work with people, cooperation, and emotional intelligence, where the highest value is shown by the group of those employed in the management (middle rank 125, 16), and the lowest group of those employed in the unit (middle rank 88.12). The variable digital literacy also shows a statistically significant difference ( $H = 11.513$ ,  $p = 0.009$ ), where the group of those employed in middle management shows a distinctly highest value, while the group of those employed is the lowest in management (middle rank 81.66).

### *Table 5*

For field of work in tourism, Table 5 shows that the statistically significant difference ( $H = 10.010$ ,  $p = 0.040$ ) is shown for the set of competences on high level of hospitality, ability to work with people, cooperation and emotional intelligence, where the highest value is shown by the group of those employed in destination management (middle rank 105.75), and the lowest group of those employed in the field of experiences in tourism (middle rank 64.29). In the set of competences creativity, innovation in the design of 5\* tourism products, there is also a statistically significant difference ( $H = 14.393$ ,  $p = 0.006$ ), where the highest value is significantly different for those employed in the field of experiences in tourism (mean rank 119.64), and the lowest in the group of those employed in the hotel industry (middle rank 78.39).

We checked the relationship between individual variables and age, years of working experience, and years in current job. The results are shown in Table 6.

*Table 6*

Table 6 shows that older respondents are more likely to report that a high degree of hospitality, the ability to work with people, cooperation and emotional intelligence is important knowledge for the tourism of the future. Older respondents also less often report that digital literacy is an important knowledge for the tourism of the future. Employees with more years of working experience are less likely to report that digital literacy is important for the tourism of the future, the same for employees who have more years within their current position. As we can see in all other cases, the correlation was not detected.

*Table 7*

Finally, the analysis of differences according to gender showed no statistical differences amongst the participants in the importance they ascribe to the competences needed for the tourism of the future (see Table 7).

## **5. Discussion**

The research identified the perception of workers regarding the competencies that will be important for tourism work in the future. Their perceptions varied according to age, education, hierarchical position within the organisation, years of experience and years within an organisation, but not according to gender.

Most importantly, workers judged that tourism future will continue to put prime emphasis on soft skills of “the human touch”, worded here as a high degree of hospitality, the ability to work with people, cooperation and emotional intelligence. This result is in line with several other expert and management studies identified in the introduction ([35, 36, 37, 38, 39, 40, 50]. Although the

importance of these competences is long-standing, there is still insufficient recognition of acquiring them in Slovenian tourism study programmes [48]. We found the highest value for this set of competences amongst those employed in the field of destination management, and the lowest amongst those employed in the area of tourism experiences thus only partly supporting the statement in the literature that tourism is fragmented into different fields and thus reflects the need for highly diverse knowledge [20]. However, perceptions of workers from other fields do not differ with regards to the ascribed importance to this competence, showing thus that there is a relatively high consensus throughout most of the tourism fields about the prime importance of “soft skills” in tourism.

The perception of this set of competences varied further according to education and age, whereby the higher educated and older valued this skill more than the less educated and younger. This is an important mismatch, since the least educated are much more commonly front-line employees than those with a postgraduate education. This mismatch is shown again with regards to workers’ hierarchical position, here again the highest value to the “soft” skills is ascribed by those in the middle management and is the lowest amongst workers employed in the unit. This result calls for further research. On the first glance we would namely expect those working more directly with guests to value “human touch” skills more since these are the skills that they use most in their everyday working environment. On the other hand, our results show the opposite. If we hypothesise here, perhaps this reflects the fact that those more educated and those in middle management are more exposed to environments where hospitality is more emphasised as an organisational value and/or have been educated more on this. Or, perhaps, this reflects the negative effects everyday emotional labour can have on tourism workers’ emotional fatigue, as shown by [51], consequently judging this skill as less important as a coping mechanism of dealing with emotional strains related to emotional labour.

Even more surprising than the results on “soft skills” is the result regarding digital literacy skills. These were judged as having the least importance for the future of tourism industry, thus in sharp contrast to other reports. UNWTO asserts digitalisation is the most important competence for the future of tourism work. Our results show a mismatch between such digital forecasts and the imagined future of tourism workers in Slovenia. The mismatch in perceived importance of digital skills probably reflects the workers current everyday experiences whereby the digital component amongst tourism workers does not seem to be profound. As in previous research [42, 44], here too we find this depending largely on age and education, with younger and more educated participants valuing digital skills more than their older and less educated counterparts. Furthermore, our results show a statistically significant mismatch between middle management (heads of unit) and management in perception of importance of digital skills for the future of tourism. The middle management participants have higher perception of importance of digital skills for the future of tourism than the management. But there was no significant differences amongst other groups. We hypothesise here that the mismatch could be a reflection of the digital

world affecting especially the world of middle management through the increase of various operations optimising software whereby it might be the responsibility of the middle management to directly oversee the implementation of such innovation within an organisation, thus them having a greater perception of importance of digital skills for the future. More research, however, should be done on this in the future to ascertain the reasons and consequences of this mismatch.

As the second most important set of competences needed in the future the respondent's judged ability and flexibility with a constant willingness to learn, reflecting thus their understanding that the world of tourism will continue to change (with soft skills and emotional intelligence, however, always staying most important). This is in line with UNWTO expert opinion that in the future it will be critical for tourism professionals to develop their skills continuously. It is also in line with other current general recommendations for higher education as one of the prime arguments on why higher education is needed, both in tourism and in general [52, 53]. Interesting however, this was the only set of competences not depending on education. It was also not correlated with one's hierarchical position within an organization, nor with age, nor with any of the other analyzed variables. While the previous research and discussion were focused mostly on professionals and managers, our results thus show that the adaptability and flexibility is valued within all sets of education, not only amongst those higher educated or higher up the hierarchical ladder. Flexibility and adaptability are thus recognized as having importance for all areas tourism work and should continue to be embedded in all types of tourism curriculums, both formal and informal.

Third, while other research revealed that workers' work ethics is valued highly mostly amongst managers [44], this study shows that tourism workers in general place "passion and commitment to hard work" on the third place and there were no differences amongst them with regards to their hierarchical position. Even more surprising, the results revealed that that less educated place a higher value on this set of competences than those more educated. These competencies are related to the value system of the individual, which we build through education and organisational culture [54]. The need to nurture and promote values that enable a properly functioning work ethics is the responsibility of all providers of study programs and training in tourism. The development of ethical values is carried out through appropriate interpersonal relationships and cooperation and the promotion of work habits among students, and this is becoming more recognised in tourism pedagogy [55]). However, in contrast to research on so-called "grit" [54], our results show that higher levels of education in tourism work do not mean higher perceived importance of work ethics, but quite opposite: those who are less educated, primarily see passion and commitment to hard work as of primary importance for the future of tourism. This directly reflects the dark side of tourism work for those less educated: precarity, 24/7 working hours, high seasonality, and highly physically or emotionally draining (e.g. [8]). So, while previous research shows that especially management calls for hard working and obedient workers [44], our results show even more importantly, that the Slovenian less educated workers themselves seem to internalise this

reality and themselves call for this competence to be important in the future of tourism even more than the management.

Finally, creativity and innovation in the design of 5\* tourism products were on average judged as less important for the future than soft skills, adaptability or work ethics. As presented in the introduction, in reaction to the COVID-19 some authors argued for education that will aid students to find their niche via more focus on innovation and creativity, extended connection with the industry and even more diverse skills [37, 38]. Our results show that within the whole sample this set of skills is not of prime importance and is a set of skills valued by specific subsegments, depending primarily on education, which is in line with previous research [42, 44]). An important result is that workers from the hospitality field of tourism judged this set of competences to be less important than workers from the field of experiences in tourism, which is probably a reflection of the fact shown in other research [56], that the hospitality industry is the least innovative service activity.

To conclude with the discussion on the role of gender. Our results show no statistically significant differences amongst male and female respondents on any of the five analysed sets of competences. This is in direct opposition to results of [43] who found that male respondents perceive human resource management competencies as more important than do female respondents. In opposition to results of [47] who that female employers place more emphasis on social and interpersonal skills compared to male employers. Our results thus negate any differences between the two sexes and thus any potential stereotyping based on tourism workers' gender.

## **6. Conclusions**

The research provided an insight into tourism employees' perceptions of future competence needs and compared to other research that mostly focused on management perception bring important new insights. Focusing on employees is of highest importance since it is employees themselves who have the best insight into everyday performances of their work and it is their perception which will largely affect their motivation for future education. With the current extreme lack of labor in tourism it is even more important to focus on tourism employees themselves and not only management. Following the COVID crisis, the labor market in the tourism industry has shrunk, while the competitiveness of the labor force in tourism has increased. The labor market in tourism will have to respond to the new reality by adapting and will look for employees with a very wide range of competencies, as fewer employees will perform several different tasks.

The results of the research were both confirming some age-old known facts but also revealed some important new information. As with past research, the role of "soft skills": high degree of hospitality, the ability to work with people, cooperation and emotional intelligence received highest perceived importance for the tourism of the future also in this research. The same goes for

adaptability and flexibility, whereby not only those higher educated or those with management positions but all workers perceive this to be of prime importance for the future of tourism. Similarly, reflecting previous research on the lack of innovation in the hospitality field of tourism, the results on perceptions of creativity and innovation show that workers from the hospitality field of tourism perceive this set of competences to be the least important in the future while workers in other fields judge it more positively. Additionally, as expected, the perceptions mostly varied according to age, education, hierarchical position within the organization, years of experience and years within an organization, but not according to gender. However, the specific details of the relationships showed a more nuanced picture and revealed important aspects that need to be investigated further in future research.

The most unexpected result of this research is regarding the perceived importance of digital literacy. While the literature emphasizes that since customers accept technological change if they enable faster and easier services as a result, the expectations of guests and tourists are also higher, to which tourism employees with appropriate competencies can respond. Many tourism companies are introducing new technologies that are changing the ways and forms of work in tourism, while helping employees to perform their tasks more efficiently. The continuous process of digitization of procedures in tourism requires continuous training and education of employees. This flexibility is supposed to provide a competitive advantage, while at the same time allocating responsibility for acquiring new competencies between the employer and the employee. However, our research results show a low ranking of digital literacy for the tourism of the future as perceived by tourism employees: it was perceived as the least important of the analyzed five sets of competences. Tourism workers thus do not expect the digital reality to gain as great an importance as predicted by expert reports: workers expect that the “human touch” of the tourism industry will remain to be the most important and that the digital skills are the least important.

The challenge that this sets for the future of tourism education is that it potentially means lower interest amongst workers in the uptake of digital skills since they judge them as least important for the future, especially older workers. This needs to be analyzed in further research and kept in mind when creating future tourism education curricula. Additionally, to our knowledge this was the first such research showing a statistically significant mismatch between middle management and management in perception of digital skills: middle management perceives digital literacy as more important than management. This warrants future research attention since it might be a reflection of specifics of how middle management in tourism operates and also shows that they are also potentially the most important subsegment for the “early adoption” of digital innovations and their further spread amongst colleagues.

Another important result of this study is not only the relatively high perceived importance of work ethics (passion and commitment to hard work) amongst management personnel but the fact that the perception of importance of this set of competences was higher among the less educated and

those lower on the organizational hierarchy. This on the one hand reflects the dark side of hard tourism work, but on the other hand also reveals that workers have internalized this work ethics more than their more educated and managerial counterparts, potentially having important consequences not only for the question of how to include “grit” in education curricula, but also the extent to which such internalization affects employees’ collective bargaining motivation and consequently power. This result thus provided an important insight on the role of internalizing work ethics in tourism labor that needs to be further researched in the future.

Finally, an important limitation of this study is the fact that it was conducted before the COVID-19 epidemic, which raises some additional questions related to the implications for the tourism labor market and changes in the competencies of tourism employees. Carrying out the same research after the end of the epidemic and comparing the results is a great challenge and an opportunity for further research.

To conclude, promoting the acquisition of skills, competencies, and qualifications for tourism of the future is the responsibility of educational institutions in the field of tourism, tourism companies and organizations and employees in tourism. Education and training are the key building blocks of tourism development, which justifies higher expenditures and investments in this area. The continuous development of education and training for tourism employees enables the integration of standards, knowledge, skills, and abilities for tourism of the future into educational programs and curricula. The state should recognize the importance of competencies for the tourism of the future and develop national mechanisms to guide tourism knowledge and skills policy. Only the creation of partnerships between stakeholders in the field of tourism education and training and the tourism industry can lead to adequate results in the acquisition of future tourism competencies. Education and training programs for tourism employees must balance content related to personal competencies with content related to professional competencies. It is also important to recognize the value in providing flexible training arrangements and providers. There is no ‘one size fits all’ in terms of training for employees, indicating the need for an agile and responsive approach to identifying and adapting to competency needs. A continuous dialogue between employers and educators is an important part of this process. To borrow the words of Drucker (xy): “The best way to predict the future is to create it”, and the beginning of creation is always learning. By preparing appropriate tourism study programs that will include the competencies of the future in tourism, tourism educators will be able to become an active player in the events as they unfold.

## References

- [1] Hosta M, Plevnik M. Inspiring Breathwork Retreats in the Post-COVID-19 Period. *Academica Turistica-Tourism and Innovation Journal* 2022; 15(1): 123-133.  
DOI: <https://doi.org/10.26493/2335-4194.15.123-133>



- [2] Turnšek M, Brumen B, Rangus M, Gorenak M, Mekinc J, Štuhec TL. Perceived threat of COVID-19 and future travel avoidance: Results from an early convenient sample in Slovenia. *Academica Turistica-Tourism and Innovation Journal* 2020; 13(1): 3-19. DOI: <https://doi.org/10.26493/2335-4194.13.3-19>
- [3] Orlowski LT. The 2020 pandemic: Economic repercussions and policy responses. *Review of Financial Economics*. 2021; 39(1): 20-26. DOI: 10.1002/rfe.1123
- [4] International Labour Organization. ILO Sectoral Brief [Internet]. Available from: [https://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---sector/documents/briefingnote/wcms\\_741468.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/briefingnote/wcms_741468.pdf) [Accessed 10 December 2020]
- [5] Mulder N. The impact of the COVID-19 pandemic on the tourism sector in Latin America and the Caribbean, and options for a sustainable and resilient recovery. *International Trade series* 2020; No. 157 (LC/TS.2020/147). Santiago: ECLAC
- [6] World Travel & Tourism Council. High Level Enabling Policies [Internet]. Available from: <https://wttc.org/COVID-19/Government-Hub> [Accessed 4 January 2021]
- [7] UN World Tourism Organization. Tourism Online Academy [Internet]. Available from: <https://www.unwto-tourismacademy.ie.edu/> [Accessed 6 January 2021]
- [8] Baum T. Human resources in tourism: Still waiting for change? –A 2015 reprise. *Tourism Management*. 2015; 50: 204–212. DOI: <https://doi.org/10.1016/j.tourman.2015.02.001>
- [9] Alexis P. R-Tourism: Introducing the Potential Impact of Robotics and Service Automation in Tourism. *Ovidius University Annals, Series Economic Sciences*. 2017;1: 211-2016.
- [10] Tussyadiah I. A review of research into automation in tourism: Launching the Annals of Tourism Research Curated Collection on Artificial Intelligence and Robotics in Tourism. *Annals of Tourism Research*. 2020; 81:102883. DOI: <https://doi.org/10.1016/j.annals.2020.102883>
- [11] Ford M. *The rise of the robots: Technology and the threat of a jobless future*. New York: Basic Books; 2015.
- [12] Susskind D. *A World Without Work: Technology, Automation and How we Should Respond*. London: Allen Lane an imprint of Penguin Books; 2020.
- [13] Mei XY. Gaps in tourism education and workforce needs: attracting and educating the right people. *Current Issues in Tourism* 2017; 22(12): 1400-1404. doi: 10.1080/13683500.2017.1402870

- [14] Atef TM. A tourism and hospitality education management model: the case of the tourism department of sultan Qaboos university. *Journal of Tourism and Hospitality Management* 2018; 6(1): 39-54. doi: 10.15640/jthm.v6n1a5.
- [15] Perman L, Mikinac K. Effectiveness of education processes in tourism and hospitality in the republic of Croatia. *Tourism and Hospitality Industry 2014, Congress Proceedings Trends in Tourism and Hospitality Industry*. University of Rijeka, Faculty of Tourism and Hospitality Management: 2014.
- [16] Li L, Li J. Hospitality education in China: a student career-oriented perspective”, *Journal of Hospitality, Leisure, Sport and Tourism Education* 2013; 12(1): 109-117. DOI: <https://doi.org/10.1016/j.jhlste.2012.12.001>
- [17] Shariff NM, Kayat K, Abidin AZ. Tourism and Hospitality Graduates Competencies: Industry Perceptions and Expectations in the Malaysian Perspectives. *World Applied Sciences Journal* 2014; 31(11): 1992-2000. DOI: 10.5829/idosi.wasj.2014.31.11.718
- [18] Jackson D, Chapman, E. Non-technical skill gaps in Australian business graduates. *Education + Training* 2012; 54(2/3): 95-113. DOI: <https://doi.org/10.1108/00400911211210224>
- [19] Lashley C. Hospitality and hospitableness. *Research in Hospitality Management* 2015; 5(1): 1-7. DOI: [10.1080/22243534.2015.11828322](https://doi.org/10.1080/22243534.2015.11828322)
- [20] Wang YF, Tsai CT. Employability of hospitality graduates: Student and industry perspectives. *Journal of Hospitality & Tourism Education*. 2014; 26(3): 125–135. DOI:[10.1080/10963758.2014.935221](https://doi.org/10.1080/10963758.2014.935221)
- [21] Cooper C. Contemporary Tourism Education: Notes from the Frontline. *Tourism Recreation Research*. 2010; 35(1): 75-80. DOI: <https://doi.org/10.1080/02508281.2010.11081621>
- [22] Yedla VR, Ajoon EJ. Re-Orienting Curriculum Of Tourism Education In The Context Of Covid-19: An Empirical Study. *Habitus Toplumbilim Dergisi*. 2022; 3(3): 251-274. Available from: <https://dergipark.org.tr/en/pub/habitus/issue/69096/1077930>
- [23] Ye H, Law R. Impact of COVID-19 on hospitality and tourism education: a case study of Hong Kong. *Journal of Teaching in Travel & Tourism*. 2021; 21(4): 428-436. DOI:<https://doi.org/10.1080/15313220.2021.1875967>
- [24] Edelheim J. How should tourism education values be transformed after 2020? *Tourism Geographies*. 2020; 22(3): 547-554. DOI:[10.1080/14616688.2020.1760927](https://doi.org/10.1080/14616688.2020.1760927)

- [25] Rozmiarek M, Malchrowicz-Moško E. The Impact of COVID-19 Pandemic on the (Un) popularity of Higher Tourism Education in Poland. *Journal of Education, Health and Sport*. 2022; 12(1): 283-291. DOI:[10.12775/JEHS.2022.12.01.24](https://doi.org/10.12775/JEHS.2022.12.01.24)
- [26] Üngüren E, Kaçmaz YY. Does COVID-19 pandemic trigger career anxiety in tourism students? Exploring the role of psychological resilience. *Journal of Hospitality, Leisure, Sport & Tourism Education*. 2022; 30: 100369. DOI: <https://doi.org/10.1016/j.jhlste.2022.100369>
- [27] Reichenberger I, Raymond EM. Students' perceptions of tertiary tourism education and careers during the Covid-19 pandemic. *Journal of Teaching in Travel & Tourism*. 2021; 21(4): 380-402. DOI:[10.1080/15313220.2021.1950593](https://doi.org/10.1080/15313220.2021.1950593)
- [28] Higgins-Desbiolles F. The “war over tourism”: Challenges to sustainable tourism in the tourism academy after COVID-19. *Journal of sustainable tourism*. 2020; 29(4): 551-569. DOI:[10.1080/09669582.2020.1803334](https://doi.org/10.1080/09669582.2020.1803334)
- [29] Mínguez C, Martínez-Hernández C, Yubero C. Higher education and the sustainable tourism pedagogy: Are tourism students ready to lead change in the post pandemic era? *The Journal of Hospitality Leisure Sport & Tourism*. 2021; 29(6): 100329. DOI:[10.1016/j.jhlste.2021.100329](https://doi.org/10.1016/j.jhlste.2021.100329)
- [30] Romão J. When Covid-19 Meets Climate Change: Rethinking Tourism Education and Research in Contemporary Creative Economies. *Journal of Yasuda Women's University*. 2021; (49): 271-282.
- [31] Tiwari P, Séraphin H, Chowdhary NR. Impacts of COVID-19 on tourism education: Analysis and perspectives. *Journal of Teaching in Travel & Tourism*. 2021; 21(4): 313-338. DOI: <https://doi.org/10.1080/15313220.2020.1850392>
- [32] OECD. *Tourism Trends and Policies 2018* [Internet]. Available from: [https://www.oecd-ilibrary.org/urban-rural-and-regional-development/oecd-tourism-trends-and-policies-2018\\_tour-2018-en](https://www.oecd-ilibrary.org/urban-rural-and-regional-development/oecd-tourism-trends-and-policies-2018_tour-2018-en) [Accessed 15 October 2020]
- [33] Wanga X, Zeng Y, Arntzenb AA, Kim KY, Liud Y. Organizational Capability: Skills Related to organizational knowledge. *Journal of Integrated Design and Process Science* 2017; 21 (1): 1-3. DOI 10.3233/jid-2017-0010
- [34] Al-Ghurbani AM, Jazim F, Abdulrab M, Al-Mamary YHS, Khan I. The Impact of internal factors on the use of technology in higher education in Saudi Arabia during the COVID-19 pademic. *Human Systems Management* 2021; Pre-press, no. Pre-press:1-20. DOI 10.3233/HSM-211219

- [35] World Tourism Organization, The Future of Work and Skills Development in Tourism – Policy Paper 2019, UNWTO, Madrid, DOI: <https://doi.org/10.18111/9789284421213>)
- [36] Centre for Strategy and Evaluation Services. Mapping and performance check of the supply side of tourism education and training. [Internet]. Available from: <http://ec.europa.eu/DocsRoom/documents/15846/attachments/1/translations>. [Accessed 30 January 2021]
- [37] Johanson M, Ghiselli R, Shea LJ, Roberts C. Changing competencies of hospitality leaders: A 25-year review. *Journal of Hospitality & Tourism Education*. 2011; 23(3): 43-47. DOI:[10.1080/10963758.2011.10697012](https://doi.org/10.1080/10963758.2011.10697012)
- [38] Sheldon P, Fesenmaier D, Woeber K, Cooper C, Antonioli M. Tourism education futures, 2010–2030: Building the capacity to lead. *Journal of Teaching in Travel & Tourism*. 2008; 7(3): 61–68. DOI:[10.1080/15313220801909445](https://doi.org/10.1080/15313220801909445)
- [39] Zehrer A, Mössenlechner C. Key competencies of tourism graduates: The employers' point of view. *Journal of Teaching in Travel & Tourism*. 2009; 9(3): 266–287. DOI:[10.1080/15313220903445215](https://doi.org/10.1080/15313220903445215)
- [40] Munar AM, Montaña JJ. Generic competences and tourism graduates. *Journal of Hospitality, Leisure, Sports and Tourism Education*. 2009; 8(1): 70-84. DOI: <https://doi.org/10.3794/johlste.81.206>
- [41] Shariff NM, Kayat K, Abidin AZ. Tourism and hospitality graduates competencies: Industry perceptions and expectations in the Malaysian perspectives. *World Applied Sciences Journal*. 2014; 31(11): 1992–2000. DOI: 10.5829/idosi.wasj.2014.31.11.718
- [42] Kimeto JC. Tertiary tourism graduate employees and tourism employers' perceptions on tourism skills and competencies relevant for providing quality tourism services in Kenya. *Tourism Critiques: Practice and Theory* 2021; 2(1): 20-37 DOI 10.1108/TRC-07-2020-0013
- [43] *Marneros S, Papageorgiou G, Efstathiades A*. Identifying key success competencies for the hospitality industry: the perspectives of professionals, *Journal of Teaching in Travel & Tourism* 2020; 20:4: 237-261, DOI: [10.1080/15313220.2020.1745732](https://doi.org/10.1080/15313220.2020.1745732)
- [44] Lou NM, So ASI, Hsieh YJ. Integrated resort employee competencies: A Macau perspective. *International Journal of Contemporary Hospitality Management* 2018; 31(1): 247-267. DOI:10.1108/IJCHM-07-2017-0431

- [45] *Tavitiyaman P, Weerakit N, Ryan B.* Leadership Competencies for Hotel General Managers: The Differences in Age, Education, and Hotel Characteristics. *International Journal of Hospitality & Tourism Administration* 2014; 15:2: 191-216, DOI: [10.1080/15256480.2014.901069](https://doi.org/10.1080/15256480.2014.901069)
- [46] Madgavkar A, Schaninger B, Smit S, Woetzel J, Samandari H, Carlin D, Seong, J, Chockalingam K. *Human capital at work: The value of experience.* The McKinsey Global Institute; 2022.
- [47] Fominiene VB, Mejeryte-Narkeviciene K, Wozniewicz-Dobrzynska M. *Employees Career Competence for Career Success: Aspect of Human Resources Management in Tourism Sector.* *Transformations in Business & Economics.* 2015; 14(2B(35B)): 481-493.
- [48] Brumen B, Gorenak M, Kuntarič M, Mekinc J, Mušič K, Rangus M, Sikošek M, Trdina A, Turnšek M. *Identification of employee competencies necessary for the long-term competitiveness of Slovenian tourism and the formulation of proposals for the modernization of educational programs: the research report.* Brežice: Faculty of Tourism; 2020.
- [49] Tabachnick BG, Fidell LS, Ullman JB. *Using multivariate statistics (Vol. 5).* Boston, MA: Pearson; 2007.
- [50] Košmelj B, Rovan J. *Statistično sklepanje.* Ljubljana. Ekonomska fakulteta Univerze v Ljubljani; 1997.
- [51] Cronbach LJ. Coefficient alpha and the internal structure of tests. *Psychometrika.* 1951; 16(3): 297–334.
- [51] Lee JJ, Ok C. Reducing burnout and enhancing job satisfaction: Critical role of hotel employees' emotional intelligence and emotional labor. *International Journal of hospitality management* 2012; 31(4): 1101-1112. DOI : [10.1016/j.ijhm.2012.01.007](https://doi.org/10.1016/j.ijhm.2012.01.007)
- [52] Wrathall J. Steriopoulos E. *Reimagining and Reshaping Events.* Oxford: Goodfellow Publisher 2022. DOI: 10.23912/9781911635871-4918
- [53] *Steriopoulos E, Goh E, Harkison T.* (2022) Practical teaching tips on designing authentic assessments in Tourism, Hospitality and Events (THE) higher education, *Journal of Teaching in Travel & Tourism*, DOI: [10.1080/15313220.2022.2096181](https://doi.org/10.1080/15313220.2022.2096181)
- [54] Duckworth, A. *Grit: The power of passion and perseverance.* New York: Scribner New York; 2016.

[55] Edelheim J, Joppe M, Flaherty J. Teaching Tourism: Innovative, Values-based Learning Experiences for Transformative Practices. Edward Elgar Publishing; 2022.

[56] Martín-Rios C, Ciobanu T. Hospitality innovation strategies: An analysis of success factors and challenges. *Tourism Management* 2019; 70: 218-229. DOI: <https://doi.org/10.1016/j.tourman.2018.08.018>

Table 1  
Presentation of sample and population characteristics.

Variable	Sample		Population	
	No. Answers	%	No.	%
<b>Gender</b>				
male	71	33.8	3493	36.4
female	134	63.8	6115	63.6
do not want to answer	5	2.4		
<b>Age</b>				
Average age in years	41.01		42.08	
<b>Working experience</b>				
Average working experience in years	17.55			
<b>Working experience in current position</b>				
Average working experience in current position in years	8.77			
<b>Position within organization</b>				
Employees within a unit	109	53.2		
Head of the unit	63	30.7		
Management	20	9.8		
Self-employed	13	6.3		
<b>Size of the organization</b>				
Micro (up to 10 employees)	39	18.8		
Small (11 to 50 employees)	45	21.7		
Mid-size (51 to 250 employees)	61	29.5		
Large (above 251 employees)	57	27.5		
Do not know / do not want to disclose	5	2.4		
<b>Type of organization</b>				
Hotel	81	38.9		
Travel agency	33	15.9		
Food and beverage	32	15.4		
Destination management organization	31	14.9		
Experiences in tourism	7	3.4		
Other	24	11.5		
<b>Level of education</b>				
Primary school or less	12	5.8		
Secondary vocational school	22	10.6		
Secondary professional education	41	19.7		
Higher professional education	28	13.5		
Higher/University education	74	35.6		
Postgraduate education	31	14.9		

Table 2  
Descriptive statistics of variables showing key knowledge, abilities, and skills for future tourism

<b>Ranking of importance of the sets of skills and competences</b>	<b>N</b>	<b>Mean value</b>	<b>St. deviation</b>
High degree of hospitality, ability to work with people, cooperation, and emotional intelligence	209	3.68	1.2888
Adaptability and flexibility with a constant willingness to learn	209	3.38	1.1626
Passion and commitment to hard work	207	3.11	1.4422
Creativity and innovation in the design of 5* tourism products.	209	2.52	1.4042
Digital literacy	207	2.34	1.3084

The participants were provided the list of these five sets of skills and competences and were asked to rate them according to their perceived importance for the future of tourism from most important (value 5) to least important (value 1). The five sets of competences were derived from a focus group study (n=23) amongst representatives of Slovenian tourism [48]



Table 3  
Kruskal-Wallis test of knowledge sets that will be needed for future tourism according to education.

<b>Variable</b>	<b>H</b>	<b>p</b>	<b>Level of education</b>	<b>Mean rank</b>
Passion and commitment to hard work	11.391	0.044	primary school or less	135.50 <sup>(a)</sup>
			secondary vocational (3 years)	117.89
			secondary professional (4 years or 3 + 2 years)	110.77
			Professional degree	103.19
			University degree	94.10
			postgraduate	83.26 <sup>(a)</sup>
High degree of hospitality, ability to work with people, cooperation, and emotional intelligence	17.207	0.004	primary school or less	47.17 <sup>(a), (b), (c)</sup>
			secondary vocational (3 years)	87.09
			secondary professional (4 years or 3 + 2 years)	102.06
			Professional degree	103.65 <sup>(c)</sup>
			University degree	108.10 <sup>(b)</sup>
			postgraduate	121.47 <sup>(a)</sup>
Digital literacy	19.894	0.001	primary school or less	160.25 <sup>(a), (b), (c)</sup>
			secondary vocational (3 years)	124.20
			secondary professional (4 years or 3 + 2 years)	93.56 <sup>(b)</sup>
			Professional degree	105.02
			University degree	94.89 <sup>(c)</sup>
			postgraduate	88.61 <sup>(a)</sup>
Creativity and innovation in the design of 5 * tourism products	15.262	0.009	primary school or less	43.33 <sup>(a), (b), (c)</sup>
			secondary vocational (3 years)	95.73
			secondary professional (4 years or 3 + 2 years)	106.28 <sup>(b)</sup>
			Professional degree	101.31
			University degree	111.90 <sup>(a)</sup>
			postgraduate	104.37 <sup>(c)</sup>

Table 4

Kruskal-Wallis test of knowledge sets that will be needed for tourism of the future according to the position in the organization

<b>Variable</b>	<b><i>H</i></b>	<b><i>p</i></b>	<b>Position within the organization</b>	<b>Mean rank</b>
High degree of hospitality, ability to work with people, cooperation, and emotional intelligence	14.407	0.002	Employee	88.12 <sup>(a), (b)</sup>
			Middle management	117.27 <sup>(b)</sup>
			Management	125.16 <sup>(a)</sup>
			Self-employed	98.62
Digital literacy	11.513	0.009	Employee	112.59 <sup>(a)</sup>
			Middle management	86.06
			Management	81.66 <sup>(a)</sup>
			Self-employed	92.23

Table 5

Kruskal-Wallis test of sets of knowledge that will be needed for the tourism of the future according to the field of work in tourism

<b>Variable</b>	<b><i>H</i></b>	<b><i>p</i></b>	<b>Field of work within tourism</b>	<b>Mean rank</b>
High degree of hospitality, ability to work with people, cooperation, and emotional intelligence	10.010	0.040	Hotel industry	95.23
			Travel agencies	71.48
			Food and beverage sector	89.28
			Destination management	105.75 <sup>(a)</sup>
			Experiences in tourism	64.29 <sup>(a)</sup>
Creativity and innovation in the design of 5 * tourism products	14.393	0.006	Hotel industry	78.39 <sup>(a)</sup>
			Travel agencies	108.69 <sup>(a)</sup>
			Food and beverage sector	104.27
			Destination management	81.50
			Experiences in tourism	119.64

Table 6  
Relationship between individual variables and demographic data

<b>Variable</b>	<b>Age</b>	<b>Years of working experience</b>	<b>Years in current job</b>
High degree of hospitality, ability to work with people, cooperation, and emotional intelligence	0.205**	0.193**	-0.129
Digital literacy	-0.175*	-0.142*	-0.156*
Creativity and innovation in the design of 5 * tourism products	-0.107	-0.035	-0.089
Passion and commitment to hard work	0.054	0.025	0.003
Adaptability and flexibility with a constant willingness to learn	0.094	0.088	0.056

\*p=<0,05

\*\*p=<0,01

Table 7

Mann-Whitney U test of sets of knowledge that will be needed for the tourism of the future compared to gender

<b>Variable</b>	<b><i>U</i></b>	<b><i>p</i></b>	<b>Gender</b>	<b>Mean rank</b>
Passion and commitment to hard work	4513.000	0.862	Male	99.56
			Female	101.02
Adaptability and flexibility with a constant willingness to learn	4081.000	0.162	Male	93,48
			Female	105.11
High degree of hospitality, ability to work with people, cooperation, and emotional intelligence	4380.000	0.535	Male	97.69
			Female	102,81
Digital literacy	4326.500	0.503	Male	104.06
			Female	98.54
Creativity and innovation in the design of 5 * tourism products	4168.500	0.243	Male	107.29
			Female	97.57