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Islamic Teachers' Perceptions of Using Gamification in Saudi Arabian Elementary Schools

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ABSTRACT

The current study aimed to examine the practice-based perceptions of Islamic teachers of Saudi Elementary school who do teach with gamification - either playing or creating games-in classrooms in order assess their opinions of using games in their teaching Islamic lessons courses. Semi-structured interviews were conducted with 192 Saudi elementary education Islamic teachers. The study found that the use of gamification in the Saudi elementary schools played a pivotal role in enhancing the elementary students' intrinsic and extrinsic motivations, with a total mean hit 4.67. Also, gamification creating attractive learning environment received the second highest rating, with total average of 4.48. In addition, the positive effects of gamification for enhancing student's collaboration work with others was the third highest rating, with total mean of 4.37. The findings revealed that most Islamic teachers of Saudi elementary schools who actually use gamification in their classrooms perceived elementary school student engagement with a game and cognitive learning outcome as effects of the use of games in formal teaching settings. Also, the findings of the study recommend there is a need for further studies to examine perceptions of teachers of other disciplines, such as languages, arts, social science, science, computer science and the like of using gamification in teaching and learning. Also, qualitative studies may be conducted by the researchers in these domains , interviews with students, and classroom observation can be carried out to investigate Saudi students' perceptions in different educational levels of using gamification in education The pedagogical implications of these findings for the use of gamification in teachers' educational practice are discussed.

Key words: Islamic Teachers, Perceptions, Gamification, Saudi Arabian Elementary Schools

INTRODUCTION

Background

on 25 April 2016, King Salman Bin Abdulaziz Al Saud announced the Saudi Arabia's vision 2030 which consist of 13 programs and 99 initiatives in order to be pioneering and successful global model of excellence and more development country. To achieve the Saudi vision goals, the ministry of education reforms educational and administrative system for the improvement of the quality of education by developing educational philosophy, teaching methods, building students personality, and developing learning environment (Ministry of education,2019). The main problems in modern education are related to the lack of engagement and motivation of students to participate actively in the learning process. Thus, Saudi digital generation perceives traditional school as ineffectual, ineffective, unproductive and poring learning environment. Innovation in teaching improves students' self-esteem, motivation and achievement. Students who are encouraged to think creatively and independently, become more interested in discovering things for themselves, more beyond lesson time when pursuing an idea or vision. As results, their pace of learning, levels of achievement and self-esteem increase.

LITERATURE REVIEW

Education should be entertaining and fun to students, and not boredom or just a duty. Changes in teaching is also changing the classroom experience. The teaching would be highly effective if the teacher starts to use innovative teaching techniques such as gamification. To restrain the traditional approach of teaching, teachers must use innovative strategies to enhance the cognitive level of students. Students must be given the exposure to technology to compete the outer world. The positive responses of the students also demonstrate that the new techniques are effective means of reinforcing the learning process, particularly for those learners who are not getting benefited from traditional teaching.

Although teachers continuously seek the modern and recent educational strategies and teaching methods. Saudi primary education aims to enhance self-learning skills, improve the knowledge retention of learners and to promote student's commitment to their own learning process by creating and building a positive classroom climate and using multiple learning tools conducive to meaningful learning. As a literature review shows, the transformation of teaching tools and learning tasks by using games is known as gamification, game-based learning, and educational games (Werbach& Hunter, 2012). Researchers are commonly used interchangeably serious games, simulation games, computer-assisted learning tools, and interactive simulations to refer to the use of games in education (Parreno, Ibanest & Arroyo, 2016).

Deterding, Dixon, Khaled & Nacke (2011) stated that "gamification refers to the use of game-based elements such as mechanics, aesthetics, and game thinking in non-game contexts aimed at engaging people, motivating action, enhancing learning, and solving problems" (p.9). Furthermore, Huang and Soman (2013) defined gamification as "the craft of deriving all the fun and addicting elements found in games and applying them to real-world or productive activities. on his turn Huang (2013) described gamification as a "series of design principles, processes and systems used to influence, engage and motivate individuals, groups and communities to drive behaviors and effect desired outcomes" (p.6).Moreover, gamification is defined as "applying techniques based on games and videogames to motivate students and encourage their positive progress" (Carrillo.et al., 2019, p.94). gamification is essentially taking a conceptual piece of learning (module, course, quiz etc.) and incorporating it into a game-styled interaction.

Much more importantly, gamification in education has distinctive features such as users of games, learning tasks or challenges, learning levels, incentives like points or grades, classification of users by the end learning process (Kiryakova, Angelova & Yordanova,2014). In fact, "one of the flourishing application field of gamification in the past few years is education shifting the passive learning process perceptive, turning students into active protagonists of the process, to achieve specific goals' (Carrillo.et al., 2019, p93).

Regarding to the history of using game in education, Parreno, Ibanest & Arroyo (2016) asserted that "the use of games in education is not new and can be traced back to the 1960s when Piaget (1962) pointed out that games could not only help children to master their environments but also to create the worlds of their imagination. The pioneer work of Abt (1970), Malone and Lepper (1987), and Loftus and Lofuts(1983), and Malone and Lepper (1987) started a new way of thinking about games not just as pure entertainment but as a powerful tool to knowledge acquisition" (p.663).One hand, Deterding et al. (2011) mentioned that using game in education was documented in 2008 but it did not see widespread adoption before the second half of 2010. On other hand, Rodriguez and Santiago (2015) pointed out that

the term of gamification was used for the first time in 2002 by Nick Pelling, but it did not begin to gain popularity until 2010.

Of course, gamification is still rising in popularity. There has been a growing interest in applying gamification to education which has been influenced by other efforts that have been successfully used gamification in other settings such as business, marketing, corporate management, and wellness and ecology initiatives. Since, the eighties, researchers have been investigating the benefits of game and game-based approaches in education (Gee,2003; Shafer,2006;Klopfer,2008; Dicheva, Dichev, Agre and Angelova, 2015).

From the pedagogical point of view, the use of educational games in primary education as learning tools is a useful and promising approach due to its abilities to teach and the fact that they reinforce not only the knowledge but also important skills such as engaging users in solving problems problem- solving, collaboration, and communication(Lee& Hammer, 2011) and Rivas (2016) emphasized that young learners learn quickly and easily through games. Several researches affirmed that gamified learning has remarkable motivational power. It helps students to increase their dedication especially when the learners face learning difficulties and confront with obstacles, they may feel depressed, frustrated or cynical (Gee,2004). In addition, it utilizes several mechanisms to encourage students to engage with others, often without any reward, just for the joy of playing and the possibility to win. Creating a highly engaging (Kapp, 2012). Moreover, gamified learning helps educators to improve their student's abilities to perform learning activities considered complex or repetitive, to implement challenging activities, to arouse and maintain student's interest in learning a given subject, to enhance the way students learn and makes the learning experience more immersive and increases user satisfaction. Gamified learning maximizes the results of the learning process, to foster behavioral change in students, to develop applications that help students to socialize and organize themselves in group, to support students' tackling lifelong education projects and learning can take place under more favorable conditions when supported by gamified social tools. Another reason for using game in education is that games offer incentivized conditions that are remarkably effective in engaging learners and improve the learning outcomes because if gamification leads to a more rewarding and attractive learning environment, learners might be more engaged and productive(Borges, Durelli, Reis, and Isotani, 2014).

According to Dicheva, Dichev, Agre& Angelova (2015) gamification provide students with a number of learning techniques such as feedback, ordering learning tasks by their complexity, personalization. Also, Parreno, Ibanest & Arroyo (2016) stated that "Element that make games fun along with the nature of game themselves are assumed to intrinsically motivating, so applying game mechanics to the classroom may raise students' extrinsic motivation. Another advantage of using game in education, it encourages students to play an active and productive role in the learning process and enhance the learning environment by supporting the active learning, experiential and experimental learning, problem-based learning. Moreover, gamification can be used for improving students learning engagement which impact on their learning performance. Games help teachers to meet and fulfil students' needs' and offer visual learning style. as Lee and Hammer (2011) opined that using games in education improve students' confidences without fear by supporting them with learning opportunities and learning situations. It has been stated by Glover (2013) that "may be appealing and motivating for the new generation of students that grown up in the age of video games" (p.3). In fact, games provide students with immediate and frequent feedback, fun times and huge potential for educational applications. Furthermore, using games in education provides teachers with

meaningful of teaching strategies such as inquiry- based learning, and enrich the teachers and students' educational experiences.

According to Glover (2013):

> *Implementation of games elements in education is logical since there are some facts that are typical for the games and training. Users' actions in games are aimed at achieving a specific goal (win) in the presence of obstacles. In education, there is a learning objective, which has to be achieved by performing specific learning activities or interaction with educational content. Tracking the players' progress in games is an important element, because nest steps and moves are based on their results. In education, tracking the students' progress is essential to achieve the learning objectives. Students' learning path is determined by the achieved levels of knowledge and skills (p.5).*

Collaboration in education is a milestone for the effective implantation for active learning. Unlike training games possess a strong competitive element. The focus in learning process should be rather towards developing skills for collaboration and teamwork and responsibility for the performance of the group instead of competition between students" (Kiryakova, Angelova & Yordanova,2014) Gamification is not directly associated with knowledge and skills. Gamification effects students' behavior, commitment and motivation, which can lead to improvement of knowledge and skills (Huang& Soman,2013)

Literature review also shows video games have been used to teach a variety of subjects such as science education, Language and Art, history, geography, and math (DeBie& Lipmam,2012;Yang, Chien& Liu, 2012; & Parreno, Ibanest & Arroyo, 2016), and have been applied across all levels of education from primary education (Rivas, Palmero& Rodriguez,2019), to secondary education (Hong & Masood,2014), and higher education (Franco & Deluca, 2019). For implement gamification in Islamic education, teachers should take into their account the following steps: first of all, defining student's characteristics which is the key factor forlong- term success of any educational program. Understanding the learning styles will help in designing a program that empowers the students to achieve the objective of the program. If educators know their targets and audience' characteristics such as age group, learning abilities, current skillset, they will be able to set applicable context such as learning environment, sequence skills, and learning timetable (Huang and Soman, 2013). Essentially, Islamic teachers should define students' characteristics such as student age, student learning style in order to determine whether the new learning tools or educational strategies would be suitable for them. The key and decisive factors are the predisposition of the students to interact with the learning content and to participate in learning events with competitive nature. In addition, they have to keep their minds what skills are required by students to master and achieve the learning objectives. In addition, it is very important to scale the level difficulties or easy of the learning tasks. Is it possible demotivation of learners and negative outcomes. Also, it is very necessary to understand the role of student's motivations to attain the learning objectives which depends on the context of the learning process and what follows from their achievements. Secondly, teachers should identify what they want their students to accomplish by completing the education program. So, the learning objectives and behavioral goals have to be specific and clearly defined such as understanding a concept, being be able to perform a tasks after the training, completing the learning program, completing the learning assignment faster, minimize distractions in class, and students concentration through learning process (Huang and Soman, 2013). The purpose of education is to achieve the learning objectives because otherwise all activities will seem pointless. The objectives determine what educational content and activities to be included in learning process and selection of

appropriate game mechanics and techniques to achieve them. Thirdly, the educational content should be interactive, engaging and rich in multimedia elements. The training activities should be developed tailored to the learning objectives and allow multiple performances. The learning activities need to be designed so that students can repeat them in case of an unsuccessful attempt. It is very important to create conditions and opportunities to achieve the ultimate goal and measurable. Also, it helps teachers to ensure that obstacles within and between each stage are easily identifiable. As a result of repetitions students will improve their skills.

Islamic teachers have to identify the tools that would be used to measure the students' progress in the learning program and the unit of measure which could be points, times, money for example, if the students complete the learning assignment by a certain deadline, the tracking mechanism's currency is time. Also, Stage and milestones are powerful tools that enable instructors to sequence knowledge and quality what the students need to learn and achieve by the end of each stage or millstone. Thus, Islamic teachers should break down the learning content to different levels in order to encourage students accomplish learning objectives for example one students completed the learning assignment, s/he can move to the next level. For achieving the learning objectives, Islamic teachers should inform students about the learning rules and learning boundaries.

Previous Studies

Despite the benefits of using games in education, gamification has little presences in schools which asserted by Dussel and Quevedo (2010). They found out four out of five teachers have not used video games in the education process which mean it is marginal teaching tools in traditional schools. Additionally, Vaillant (2013) figured out that only 1.5% teacher used video games into learning environment while the use of games mechanics improves the abilities to learn skills by 40% (Kiryakova, Angelova & Yordanova, 2014) while Borges, Vinicius, Reis, Helena &Isotani (2014) and France & Deluca(2019) recommend to use game in education for improving students learning performances and their personality types. Although no reference to research on the teachers' perceptions of using gamification as learning tools in Saudi Arabia, to the best of our knowledge.

FOCUS OF THIS STUDY

The current study focuses on the perceptions of Islamic teachers who actually used gamification in their teaching at Saudi elementary schools and investigate what they see as the games' effects on learning and motivation.

METHODS

Objectives

The study aimed to:

a. investigate the role of using gamification and implications of its utilization in Saudi elementary schools .
b. explore how gamification played a role in in increasing of Saudi Secondary students' intrinsic and extrinsic motivations
c. Cast new light on the importance of as gamification a pivotal teaching tech-savvy resource for both teachers and students.
d. provide knowledge about the perception of Islamic teachers' perceptions teachers of using gamification in Saudi Arabian elementary schools

Questions of the Study

To meet the stated objectives, the following research questions were raised:
What are the perceptions of Islamic elementary school teachers on using gamification in Saudi Arabian elementary schools?

Design

Research recognizing the importance of using game in education in Saudi Arabian primary schools has increased because modern life has become more complex increasing the requirements for generating new knowledge, comprehension, judgment, and evaluation skills in order to succeed in their lives. It is essential to develop learners thinking skills, personality types and improve learning performance. This study is descriptive research which use to describe the characteristics of research population, phenomenon, behavior, or situation being studied. It aims to record, analyze, and interpret existing conditions involving comparison and/or contrasts without manipulating or influencing variables (Adelman, 1994). Descriptive design attempts to understand the research phenomenon, both quantitatively and qualitatively, through participant perceptions. The researcher used a mixed-methodology, which employs the combination of qualitative and quantitative approaches in different ways, such as philosophical worldview positions, data collection and the interpretations of results to broaden understanding of the research problem by building on the results from the other approach (Creswell & Plano Clark, 2011). This type of research utilizes the strength and avoid the weaknesses of qualitative and quantitative research.

According to Creswell and Plano Clark (2011), there are six strategies of mixed-methods research which are "the explanatory sequential strategy, exploratory sequential strategy, sequential transformative strategy, concurrent triangulation strategy, concurrent embedded strategy, and concurrent transformative strategy" (Creswell, 2009, p. 211). Stedman and Adams (2012)contended that researchers tend to use the mixed-method research design for several reason: it allows researchers to use multiple instruments such as using open-ended questionnaires, interviews, focus groups, document analysis, testing, and surveys for collecting more evidence for getting deep understanding of a research problem from different viewpoint either quantitative or qualitative research alone. The second reason is the mixed-methods research helps researchers to answer the study's questions from different research paradigms, educational pedagogical, participants' perspectives, or multiple philosophical viewpoints by collecting meaningful data.

Procedure

As mentioned above, this design consists of two phases, the first phase is the quantitative design which examined the Islamic teachers' perceptions of using gamification in Saudi elementary schools using an electronic questionnaire consisted of 20 items with a five- choice Likert scale (5= strongly agree, 4= agree, 3= natural, 2= disagree, 1= strongly disagree).The questionnaire allows researcher to collect data of the study population's characteristics such as educational experience and school locations. Also, it helps researcher gathering meaningful data from a large number of subjects from diverse locations and educational experience in short time with reasonably little effort and expense(Creswell, 2009; Creswell & Plano Clark, 2011).The questionnaire includes demographic information of participants, such as educational background, teaching experience, general views on using gamification in Islamic education in the Saudi elementary schools. Finally, all the survey statements were translated and checked by an accredited professional translator to avoid any translation errors or semantic misunderstanding. This helped non-English speakers understanding of the survey's concepts and enabled them to choose the appropriate answer for each statement. Once the questionnaire design process was completed, it was digitized using the Google Drive application for forms. Participants were presented with the questionnaire via WhatsApp application and text message. To minimize a low response rate, the questionnaire includes the cover letter detailing the research objectives and the sponsorship of research, wording the questionnaire easily and attractively, stating the potential benefits of the research and the length of time to complete the survey is reasonable.

A. Reliability of the questionnaire

First, all the items included in the questionnaire were checked for their reliability Cronbach's alpha is well known coefficient that estimates the proportion of variance this is systematic or consistent in a set of the scores The score achieved was 0.93, which allowed the researcher to establish the internal consistency of the tool (Mateo, 2012).And which can be considered a good indicator of its reliability.

B. Validity

To test the validity of the questionnaire, the questionnaire was pre-piloted first with some expert in the field six Saudi professors at King Khalid University, Al Jouf University, Bisha University and Najran university to assess the survey's statements in terms of their wording and relevance of the items to the study and to review the content for accuracy in the translation of the statements. Based upon the reviewer's suggestions, the necessary modifications were made to help me to measure the data accurately. These procedures were followed for the internal validity of the questionnaire. For external validity, the study's sampling type was a cluster random sample that allowed me to generalize the study's finding over the entire population. Ultimately, the questionnaire was determined to be valid, reliable, and ready for distribution to the study's sample.

At the second phase is the qualitative design using a semi-structured interview that is defined as "a process in which a researcher and participant engage in a conversation focused on questions related to a research study" (DeMarrais, 2004, p. 55).The benefit of using the face-to-face interview is to gather an essential information about participants' interpretations of the research problem which reflects the interviewee's familiarity with research phenomena and the level of personal concern and anxiety about research problem. In this study, researcher used semi-structured interview to investigate the Islamic teachers' perceptions of using gamification in Islamic education in the Saudi elementary schools. To obtain valid and reliable data, Merriam (2009) emphasized the importance of asking clear, attractive, and good questions during the interview process in order to get clear and fruitful answer. Thus, the researcher conducts a pilot interviews to check the interview question in order to extract subjects' opinions on the research problem being studied and get ready to obtain the qualitative phase professionally. Moreover, the researcher has great deal of control over the interview process such as timing of interview and answering questions in order to get the clarification information for quantitative data.

Participants

The target population for this study is all Islamic teachers in both rural and urban public elementary schools in Abha educational district, Saudi Arabia. Based on the Abha educational district statistic (2019), 192 male Islamic teachers are included in this study for two reasons: the first one, the Saudi Teachers Association, which is established in college of education in King Khalid University, helps researcher to get all the necessary statistic about all teachers in general and Islamic teachers. Secondly, the research agreement between College of Education in King Khalid University and the Abha educational district permits researcher to get access to the elementary schools for research purposes.

Data collection

Since the researcher was primarily interested in Islamic teachers' perceptions, he conducted one-on-one semi-structured interviews to examine the Islamic teachers' views on using gamification in their classes. The interview scheme consisted of questions on broad topics covering a wide variety of aspects of using games in the classroom, such as the games used, the educational goals that were addressed, the activities of the students and teacher, the perceived

outcomes and the teacher's general ideas about teaching with games. The teachers were prompted to tell their stories about their experiences with the use of games, and the topics mentioned above were used as a checklist. The teachers were also invited to provide examples. Each interview was audiotapes and transcribed. The teachers were asked to review and approve the transcripts of their interviews. The suitable and right type of sampling for accomplish the quantitative phase is cluster sampling because "it is very difficult to list all the members of a target population and select the sample from among them" (Ary et al., 2010, p. 154). For that, the researcher classifies the Abha educational district into four regions which are Abha City, Al-sawda, Al-qraa, and Prince Sultan bin Abdul-Aziz City. After that, he chooses a number of schools from each region and include all Islamic teachers in those schools. For the qualitative phase, the researcher uses purposeful sampling "also referred to as judgment sampling- sample elements judged to be typical, or representative, are chosen from the population" (Ary et al., 2010, p. 156). The purposeful sampling included all the Islamic teachers in the Abha educational district. In addition, researcher randomly selected a sample of Saudi Islamic elementary school teachers in the 2019 for the purpose of interviewing them at their schools. These interviewees represented different educational backgrounds and experience in order to determine whether or not those factors influence their perceptions toward using gamification is Saudi elementary schools. The interview questions were written in English and translated into Arabic language to make the interviewees more comfortable when answering the interview questions.

Regarding credibility and reliability of the interview questions, five academics proficient in both Arabic and English reviewed the translations to ensure they would be understood by the interviewees. They provided me with meaningful suggestions. After recording and transcribing the interview data, researcher sends the interview themes to the interviewees to check the originality and authenticity of their interviews and to get their final permissions for analyzing the qualitative data. These procedures helped me to produce 100% reliability, which is a high degree of agreement on the recording data among the interviewers.

Table 1
Number of Islamic Teachers Based on Geographical Regions in Abha educational district

Region	Number of Schools	Number of Male Islamic Teachers	Number of female Islamic Teachers
Abha city	50	70	55
Al-sawda	4	11	12
Prince Sultan Bin Abdul-Aziz city	10	8	15
Al-qraa	10	11	10
Total	74	100	92

Data Analysis

Quantitative data was analyzed using descriptive statistics to calculate the frequency and mean scores of each survey statement, percentage and standard deviation of the participants' viewpoints in order to answer the research questions on using gamification in Saudi elementary schools. Also, qualitative data was transcribed the interview data into Arabic language then translated into English by two researchers fluent in both Arabic and English in order to ensure translation accuracy. After that, researcher uses analytic induction methods to analyze the interview data by listing and summarizing all essential expressions, themes, and phrases were listed and in a separate list. These expressions and themes were coded and then categorized into groups by the similarity of their meanings and the categories of data. Finally, he identifies and labeled these categories based on the quantitative data.

FINDING

The results obtained from the analysis of the questionnaire identify the perceptions of Islamic elementary school teachers on using gamification in Saudi Arabian elementary schools. This section is used to answer the following question:

1) What are the perceptions of Islamic elementary school teachers on using gamification in Saudi Arabian elementary schools?

Through this section, researcher attempted to determine whether or not the Islamic teachers' perceptions on using gamification in Islamic education are positive, whether or not they value gamification in general or not. In order to accomplish these goals, Islamic teachers are questioned to determine their personal degree of agreement or disagreement with the benefits of using gamification in Saudi elementary schools.

Table 2
The Extent to Which Islamic Teachers Agree or Disagree with Statements on benefits of using gamification in Islamic education

Statement	Strongly agree (5)	Agree (4)	Undecided (3)	Disagree (2)	Strongly Disagree (1)	Mean *M*	Standard deviation *SD*
Gamification increases of students' intrinsic motivations.	69.6	28.3	2.2	0	0	4.67	.514
Gamification increases of students' extrinsic motivations	69.6	28.3	2.2	0	0	4.67	.514
Gamification creates attractive learning environment.	52.9	44.9	0	2.2	0	4.48	.618
Gamification helps educators to observe student learning performance.	52.9	44.9	0	2.2	0	4.48	.618
Gamification enhances student's collaboration work with others.	42.0	47.8	0	0	10.1	4.37	0.664
Gamification learning competition	36.2	63.0	0.7	0	0	4.34	.521
Gamificationproduces consolidation of learning.	29.9	46.1	10	4	10	4.31	0.551
Gamification helps educators to save learning time.	37.0	58.0	0	0.7	4.3	4.26	.737
Gamification is being funny.	47.1	40.6	0	5.1	7.2	4.21	0.841
Gamification encourages students posing questions.	68.1	11.6	2.9	8.7	8.7	4.21	1.344
Gamification increases learner engagement.	68.1	11.6	2.9	8.7	8.7	4.21	1.344
Gamification gives learners the opportunity to see real world applications	34.1	52.9	0	12.3	0.7	4.07	.948
Gamification helps students to solvecomplex problems.	50.7	26.1	0.7	13.0	9.4	3.95	1.376
Gamification provides students with immediate feedback.	30.4	42.8	14.5	12.3	0	3.91	.970
Gamification aids in cognitive development for young learners.	30.4	42.8	14.5	12.3	0	3.91	.970
Gamification aids in accessibility in the classroom.	28.3	49.3	2.2	20.3	0	3.85	1.050
Gamification provides students with learning opportunities.	39.9	30.4	8.0	16.7	5.1	3.83	1.259
Gamification allows students to face learning challenges.	39.9	34.1	1.4	11.6	13.0	3.76	1.417
Gamification gives students a reason to Learn.	21.7	38.4	9.4	16.7	13.8	3.60	1.363
Gamification can reduce learning stress	44.9	37.0	8.7	2.2	7.2	1.92	.971

DISCUSSION

As shown in Table 2, the majority of respondents (98%) emphasize on the role of gamification increases of students' intrinsic and extrinsic motivations. Illustrating this, the first and second statements of the questionnaire generated the strongest agreement with the effects of gamification in enhance student's motivations, especially young learners. Darina, Gennady and

Galia (2015) stated that teachers encounter difficulties to motivate their students because if students lose their learning motivations, they will not learn effectively. Also, they will not retain and use information successfully in their lives. So, gamification increases intrinsic and extrinsic motivations by providing students with different level of games because learners are motivated differently. In addition, Kiryakova, Angelova & Yordanova (2014) mentioned that gamification helps educators to get a classroom full of kids enthusiastic about learning, working hard, and pushing themselves to excel. As an example, Mohmmed made the following comment:

> *Student perceive teachers as positive reinforcement, especially when Islamic teachers appreciate and value student's works. For enhance student's motivation, Islamic teachers should encourage students to express their opinions, and believes through open discussions and praise the outstanding ideas. It is important to recognize students' contributions. Additionally, Islamic teachers should get students involved in the classroom by giving them the responsibility of arranging the learning environments, leading the collaboration learning groups, and passing learning materials out to others.*

Significantly, over 97% of the respondents agreed that gamification creates attractive learning environment and it helps educators to observe student learning performance. This finding is consistent with the findings of (Gee,2003; Shafer,2006; Klopfer,2008) in terms of impact of developing positive learning environment for learners including the physical learning environments components such as painting, lights, students' disks and educational technologies on students learning progress. Nora, who is the Islamic teachers in Abha, said productive learning environments is the key of the success of teaching process. So, Islamic teachers should take into their account several factors such as learners' characteristics, learning goals, learning activities, and learning technology in order to meet leaners needs and increase their learning capabilities.

Regarding the benefits of using gamification in the school setting, the majority of questionnaire respondents (90%) valued the use of game in education because it enhances student's collaboration work with others and boosts the learning competition. As a result, these findings emphasized the literature that asserts that learning competition encourages students to work harder and leads them to the innovative and productive world (Werbach& Hunter, 2012). As table 2 shows that (85%) emphasized the importance of gamification in producing consolidation of learning and helping teachers to save the learning times by using multiple learning tools.

The study finding indicated that (87%) of the study participants appreciated the role of gamification in creating funny environments and encourages students posing productive questions through open communication among students. Also, it increases learner engagement and provides students with opportunities to see real world applications. To clarify these points, Wassan stated that when students pose questions, they learn quickly. Questioning helps students to improving thinking processing skills like critical thinking, creative thinking, and problem solving. Also, it is a great potential learning resource for both self- learning and teaching others. As result, these finding were supported by Huang and Soman (2013).

As Table 2indicates, five statements produced the strongest agreement with the benefits of gamification in terms of helping students to solve complex problems (M=3.95) because it provides them with quick and immediate feedback and aids the cognitive development of young learners(M=3.91).Similarly, they appreciated the individual benefits of the use of game

in education in terms of assisting accessibility in the classroom and providing students with rich and fruitful learning opportunities. As example, Ahmed mentioned that

> *Today, Islamic teachers should be aware and understand the importance of classroom accessibility because it leads them to get benefits from each learning environment components. Also, it helps them to create well-structured environment because it is teacher responsibility to provide equal access to learning materials for all learner styles.*

This finding concurs with the major finding that emerged from Borges, Durelli, Reis, and Isotani (2014). Moreover, the majority of the questionnaire respondents (70%) recognized that it is essential that gamification allows students to face learning challenge and gives them a reason to Learn. These finding are supported in the arguments of Lee and Hammer (2011) and Rivas (2016) and Carrillo.et al. (2019) that gamification encourages students to overcome the learning challenges in order to shape their personal life and achieve learning and life goals. Gamification provides students with different kind of time managements techniques in order to finish the learning tasks on time with high-quality work. Furthermore, it improves the social life skills in terms of asking friends help, advice, or recommendations to deal with unexpected obstacles and to move effectively between the game levels.

Finally, Table 2 presented that almost (80%) of the study participants stressed that gamification can reduce learning stress which is the common experience for most learners. Thus, games allow users to have fun time and friendships with others. This finding is consistent with Rodriguez and Santiago (2015).

Limitations and suggestions for further research

This study had the following limitations:

1. The study's population is limited to Islamic teacher in the elementary schools in the Abha educational district.
2. The results of this study are generalized only to Islamic teachers' perceptions of using gamification in Saudi elementary schools.
3. This study could also be modified and used in other Saudi schools to examine differences between teacher's perceptions at each schools .

Practical and Pedagogical Implications

This study has provided spectra of recommendations for future research that includes the following:

1. It is vital to investigate perceptions of teachers in other disciplines, such as language arts, social science, English, and math toward using gamification in education
2. Qualitative studies, interviews with students, and classroom observation can be carried out to investigate Saudi students' perceptions in different educational levels toward using gamification in education

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References

Borges, S. S., Durelli, V. H. S., Reis, H. M., & Isotani, S. (2014). A systematic mapping on gamification applied to education**.** *Presented at ACM SAC'14 Conference*, Gyeongju, South Korea, 216–222.

Carrillo,Dolores López;García,Amelia Calonge;Laguna,Teresa Rodríguez;Magán,Germán Ros&Moreno, José Alberto.(2019).Using Gamification in a Teaching Innovation Project at the University of Alcalá: A New Approach to Experimental Science Practices. *The Electronic Journal of e-Learning,* 17(2),93-106.

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (September 28-30, 2011). From Game Design Elements to Gamefulness: Defining "Gamification".*In Proceedings of the 15th InternationalAcademic MindTrek Conference: Envisioning Future MediaEnvironments,* Tampere, Finland**,**ACM, 9-15.

Dicheva, Darina; Dichev, Christo, Agre, Gennady & Angelova, Galia. (2015). Gamification in education: A systemic mapping study. *Educational Technology & Society*, 18(3), 1-14.

Dussel, I., & Quevedo, L. A. (2010). *Educación y nuevas tecnologías: los desafíos pedagógicos ante el mundo digital*. Buenos Aires: Santillana.

France, Pual & Deluca, Debora. (2019). learning through action: creating and implementing a strategy game to foster innovative thinking in higher education. *Sage Journal*.50(1).23-43

Gee, J. P. (2004). *Lo que nos enseñan los videojuegos sobre el aprendizaje y el alfabetismo*. Málaga: Aljibe

Glover, I. (2013). Play as you learn: Gamification as a technique for motivation learners. In J.Herrington, et al. (Eds). *Preceding of the educational multimedia, hypermedia and telecomminutions conference.* Chesapeake, Va: AACE.

Hong, Goh Yung&Masood, Mona. (2014).Effects of Gamification on Lower Secondary School Students' Motivation and Engagement. *World Academy of Science, Engineering and TechnologyInternational Journal of Educational and Pedagogical Sciences.* 8(12), 3765-3772.

Huang, W. Hsin-Yuan & Soman, D. (2013, December 10). *Gamification of Education. Toronto: University of Toronto*. Retrieved from Inside Rotman: http://inside.rotman.utoronto.ca/behaviouraleconomicsinaction/files/2013/09/GuideGamificationEducationDec2013.pdf

Lee,J.J.& Hammer, J. (2011). Gamification in education: What, how, why bother? *Academic Exchange Quarterly*, 15,146-151

Kapp, K. M. (2012). *The gamification of learning and instruction: game-based methods and strategies for training and education*. John Wiley & Sons

Kiryakova, G., Angelova, N., & Yordanova, L. (2014). Gamification in education.*Proceedings of 9th International Balkan Education and Science Conference*.

Malone, T. W. & Lepper, M. R. (1987). Making learning fun: A Taxonomy of intrinsic motivations for learning. Aptitude, Learning, and Instruction: Vol. 3. Hillsdale, NJ: Lawrence Erlbaum,

Mateo, J. (2012). La investigación ex post-facto. In Bisquerra, R. (Ed.), *Metodología de investigación educative*. Madrid: La Muralla.195-229

Ministry of Education. (2019). Educational Initiatives. To retrieve http:// www. moe.gov.ae/en/Pages/home.aspx

Piaget, J. (1962). Play, dreams and imitation in childhood. New York: Norton

Parreno, Marti; Ibanest, Mendez & Arroyo, Alonso. (2016). The use of gamification in education: a bibliometric and text mining analysis. *Journal of Computer Assisted Learning, 32,663-676, doi:10.1111/jcal12161*

Rivas, Sánchez, E. (2016). *Pedagogía vía Twitter*. Madrid: Kolima.

Rivas, Enrique Sanchez; Palmero, Joulio Ruiz; Rodriguez, Jose Sanchez. (2019). Gamification of assessment in the natural sciences subject in primary education. *Educational science; Theory & Practice*. 19(1),95-111.

Vaillant, D. (2013). *Programa TIC y Educación Básica*. Buenos Aires: UNICEF

Werbach, K. & Hunter, D. (2012). *For the Win: How Game Thinking Can Revolutionize Your Business***.**Harrisburg: Wharton Digital Press