EVALUATION OF TEACHERS, SUPERVISORS AND ACCELERATED STUDENTS CONCERNING ACADEMIC ACCELERATION IN SAUDI ARABIA

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Abstract

Numerous studies consider academic acceleration to be the preferred method to help gifted students attain a higher level of achievement. The academic acceleration is being implemented in the Kingdom of Saudi Arabia for six years now. The current study aims to evaluate acceleration by teachers, supervisors, and accelerated students. Two questionnaires were developed. The first one consisted of (42) items and was developed to evaluate acceleration by teachers and supervisors. The second one consisted of (8) items and aimed at evaluating acceleration by the accelerated students themselves. The study sample consisted of (238:88 gifted teachers; 50 supervisors; and 100 accelerated students). The results of the sample indicated that most teachers and supervisors have considered acceleration to be a recommended method for gifted students and successful intervention for their development. These teachers and supervisors declared that the academic acceleration has helped the accelerated students to attain high levels of social competency, patent school motivation and achievement, and balanced emotional growth. The accelerated students have also expressed positive and contented statements about acceleration.

Keywords

Acceleration; Evaluation, Gifted Supervisors; Gifted teachers.

considered academic acceleration as one of the most effective, widespread and least expensive methods compared to other gifted care methods. There has been overwhelming evidence of the positive effects of acceleration on the academic, social and emotional aspects on gifted students (Sayler & Brookshire, 1993; Ma, 2002; Neihart, 2007; Jarwan & Majalli, 2009; Rogers, 2015; Ersoy& Ugur, 2017). Yet school teachers and supervisors generally use acceleration conservatively or not at all (Lee et al., 2010, p. 189). Full-year acceleration in schools around the world is rarely implemented (Wardman, 2017). Research has shown many positive points related to academic acceleration, including positive results on academic achievement and positive attitudes towards acceleration among students and teachers (Siegle et al., 2013, Hoogeveen et al., 2009; Al-Rasam, 2018). Van Tassel- Baska (2005) noted that a study of the findings of acceleration research from 1980 to 2005 showed that there were many positive effects of academic acceleration on

Various researches on acceleration were carried out in the 20th century (Hoogeveen, Hell & Verhoeven, 2005; Goodhew, 2009; Wells, Lohman &Moran, 2009; Colangelo, Assouline, Marron, Castellano, Clinkenbeard, Rogers &Smith, 2010; Lee, Kubilius, & Peternel, 2010; Wilson &Little, 2013; Rogers, 2015; Siegle, Dare & Nowicki, 2018; Sheppard, 2018). Researchers have individuals who encountered acceleration at different stages of their lives. Clark (2002) concluded that it is a serious problem not to be able to improve intellectually-superior students because they will experience discontinuity, attention deficit and frustration if they are forced to remain in their regular classes with peers of the same age because of the large difference between their learning speed and their high cognitive ability and what they encounter in their classroom. The debate highlights the issue of academic

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acceleration as one of the giftedness solutions that has proved effective in meeting gifted students ' needs. While widely practiced in the late 19th century, it remains one of the most controversial issues in the area of gifted care in the United States and other nations. Despite a wealth of research and evidence on Johns Hopkins University's most prominent theorists of academic acceleration, describe this negative attitude of academic acceleration as a humanitarian tragedy (Stanley, 1978).

The findings of several studies indicate that academic acceleration leads to better achievement of students with academic or intellectual abilities and does not adversely affect their emotional-social adaptation or growth (Jaggar, 2000; Gross, 2006; Colangelo, Assouline, 2009; Jarwan & Majalli, 2009). Gross (2006) conducted a ten-year longitudinal study between (1994- 2003) on the mental, academic, social and emotional development of Australian children and adolescents with an IQ of more than 160. The study sample consisted of 60 students, and the study results revelaed that the most effective intervention of these students is a series of accelerations by skipping at least three times and observing them. It also found that students with IQ greater than 160 who have experienced repeated acceleration have achieved greater academic success, have higher learning motivation, enjoy school and accept their older peers. Wells et al., (2009) conducted a longitudinal national educational study, which included 24,599 students between 1988 and 1992, and a study sample of 16252 students between 2002 to 2004. They compared the level of achievement of students who experienced the acceleration by one grade during their primary or middle school with students at the same level of achievement but did not experience acceleration. The results revealed that the accelerated students in the secondary stage had obtained the largest gain in achievement.

This research adds to existing literature assessing the effectiveness of Saudi Arabia's full- year acceleration programs. It also tries to fill in the gaps that previous researches concerning this matter have left out. It is noted that most researches have been conducted to investigate the impact of acceleration on the academic achievement and social-emotional growth of gifted learners (Dudin, 2007; Jarwan and Al-Majali,

2009; Radih, 2012; Ali, 2017; Masud, 2017; Al-Gamdi, 2018).

2. Academic acceleration

Academic acceleration is defined as those practices that adapt students' learning speed to their abilities, provide them with challenging tasks and help reduce the time it normally takes for students to complete their traditional education (National Association for Gifted Children, 2004). For the current study, full- year acceleration was defined as "an intervention that helps move students to an educational program at a faster rate than usual by enabling them to skip a school year or a maximum of two during their educational career". Accelerant is the student who during his academic career skips a grade. Acceleration choices include 21-possible content-based and grade-based educational approaches for gifted students (Sheppard, 2018, p. 10).

Acceleration has several types that ultimately serve to provide gifted students with facilities and enable them to learn in less time than their classmates and to boost their motivation and self-confidence. Academic acceleration is a comprehensive program to support gifted students and fulfill their cognitive and psychological needs. The American Acceleration Research Institute has identified eighteen forms of academic acceleration, including early primary school entry, dual school and university enrollment, curriculum intensification, early college admission, and acceleration in one or more subjects. Acceleration has two major types: first, content-based acceleration, in which students in the same age group receive more material than their peers do, and second, class-based acceleration that places students in classes with older students (Rogers, 2015).

Despite the popularity surrounding Templeton's study and extensive research support, many educators, and parents are still opposing acceleration because they feel that acceleration causes social and emotional problems. Acceleration opponents claim that it limits social and emotional growth and highlights the importance of the child's chronological age of development (Van Tassel-Baska, 2005). Acceleration advocates tend not to pay attention to age, but rather to emphasize the mental abilities of students that should not be sacrificed in favor of

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other considerations. They see that a lack of attention to student learning potential can lead to non-adaptation problems. So pressuring them to stay with those who are less intelligent may impede their emotional and social growth more than the escalating pressures they may face (Wells et al., 2009). In many important aspects, they are more advanced than their ordinary peers and their pace of growth and maturity is faster than expected, leaving them in a state of disarray with their ordinary peers and the normal curriculum in the classroom. In addition to providing them with more information, acceleration also enables them to think about the same depth and insight as older students. It is important to provide incentives to encourage them to develop while they learn and to participate in tasks that require them to do more, as difficult tasks are repetitive and less conducive to learning and achievement (Clark, 2002).

3. The historical backdrop of gifted education and acceleration in Saudi Arabia

Over the past decade, Saudi Arabia has seen significant changes in gifted education. One of the most interesting topics for educators might be the methodology for identifying and retaining gifted students (Aljughaiman & Ayob, 2017). Students identified as gifted were given additional assignments, much of which were not provided in regular classrooms. These students with outstanding abilities were more concerned than peers (Algefari, 2010; Alamer, 2014). Six years after the start of the use of academic acceleration in the schools of the Kingdom, it is important to evaluate the experience of acceleration from all dimensions: academic, social, and emotional and acceleration procedures. Saudi Arabia's literature on gifted education and academic acceleration is limited. The official start of gifted education in Saudi Arabia returns to 1999 (Aljughaiman & Grigorenko, 2013). Enrichment is the most commonly used method of care for gifted students in the KSA, although some aspects of enrichment are one of the types of acceleration, such as engaging gifted students in early research topics (Siegle et al., 2013). There are many types of academic acceleration, but the type of acceleration that is used in the kingdom is full-year acceleration (Ma, 2002). Whereas academic acceleration is widely used and its effectiveness was shown to meet the needs of gifted students, its use in the Kingdom is still limited because of the skeptic attitude of some teachers and parents against acceleration (Al Ghamdi, 2018). A full-year acceleration in the Kingdom means that students are allowed to exceed one academic year or a maximum of two years in their educational career, indicating that they finish the pre-university stage faster than their not accelerated peers do (Ministry of Education, 1995). The beginning of academic acceleration in Saudi Arabia started to introduce a gifted school program using the method of partial acceleration (based on the subject) to accelerate students by academic content commensurate with their abilities in one classroom or through partial participation in advanced grades (Aljughaiman & Ayoub, 2017). In 2005, the Ministry of Education in Saudi Arabia started promoting high-ability students in who showed exceptional gift and motivation and superior intellectual abilities when compared with other students of the same age. The Ministry of Education formed a committee to develop procedures for implementing the acceleration system. There are three collective efforts in the Kingdom to implement academic acceleration: giftedness and creativity (Mawhiba) King Abdulaziz and his Companions Foundation, the Ministry of Education, and the National Center for Measurement and Evaluation. The actual implementation of the academic acceleration began in 2013 (Ministry of education, 2016, p. 10). The number of accelerated students in Saudi Arabia from 2015 to 2019 is shown in Figure 1.

Figure 1. the number of accelerated students in Saudi Arabia between 2015 -2019 (Ministry of Education, 2016, P. 4)
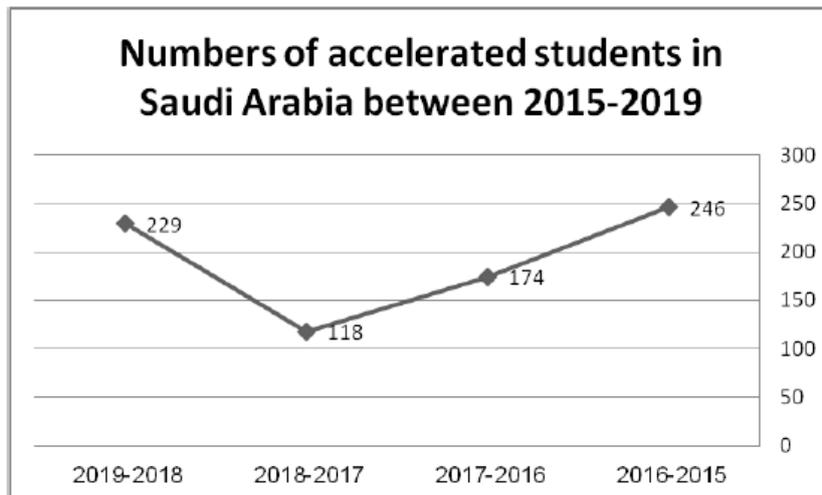
From the fourth grade to the sixth grade at the primary stage. ii) From the first to the third grade in the intermediate stage. A flowchart for acceleration shows Saudi Arabia's process:

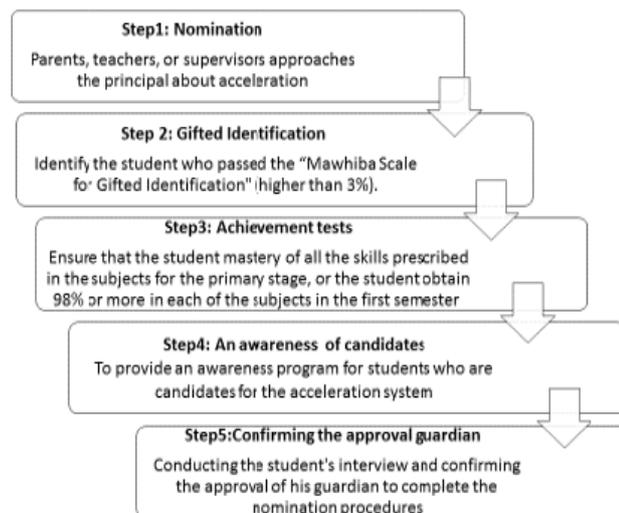Academic acceleration opportunities in the school system are twofold during the first semester: i)

Figure2. An acceleration follow the chart in Saudi Arabia

4. Method

4.1. Participants

In this study, the evaluation of full-year acceleration for Saudi Arabia was investigated by teachers, supervisors and accelerated students. In schools with academic acceleration programs in Saudi Arabia, the researcher has set a criterion for allowing the participants in the questionnaire to have experience and practice with accelerated students. The questionnaire was answered by a total of 88 teachers and 50 supervisors, who met the participation criteria. Accelerated gifted students' attitudes towards academic acceleration have also been investigated. Participants were 100 students (52 girls and 48 boys) in Grades 6, 7, and 8, their ages ranged from 11 to 14 (M= 13.44 years, SD=2.33). See table 1. For more demographic details.

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Table 1. Demographic Information

		n	%
students	**Gender**		
	Male	48	48
	Female	52	52
	Age		
	13	33	33
	14	37	37
	15	30	30
Teachers and Supervisors	**Gender**		
	Male	66	47.8
	Female	72	52.2
	Position		
	Classroom teacher	88	63.8
	Supervisor	50	36.2
	Experience		
	>5 years	56	40.6
	<5 years	82	59.4
	Highest degree		
	Bachelor's	113	81.9
	Master's	25	18.1
	Type of district		
	Riyadh	40	28.9
	Jeddah	33	23.9
	Al-Ahsa	30	21.7
	Tabuk	20	14.5
	Abha	15	10.9
students	Male	48	48
	Female	52	52

4.2. Measures

4.2.1. The questionnaire of evaluation full -year acceleration by teachers and supervisors

The researcher developed a questionnaire to evaluate a full-year acceleration by teachers and supervisors. The questionnaire has 42 items organized into three-dimension. a) academic aspect = 12 items; b) social-emotional aspect = 15 items; and c) acceleration procedures aspect = 15 items. It has a 5-point scale as follows: strongly disagree rated 1, disagree rated 2, I cannot decide rated 3, agree rated 4, and strongly agree rated 5. A principal components factor analysis was conducted on 42 items with Holting Varmix rotation. The Kaiser- Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO=.87 significant at 0.001, and all KMO values for each item were greater than .88, which is above .5 (the acceptable limit). An initial analysis was conducted to obtain eigen values for each factor in the data. Three factors had eigen values over Kaiser's criterion of (1) and in combination explained 77.99% of the variance. The items that cluster on the same factor suggest that factor 1 represent the academic (12) items, (eigen value= 6.31, % of variance= 14.7); factor 2 represent the social/ emotional (15) items (eigen value= 5.97, % of variance= 13.9); factor 3 represent the acceleration system and procedures (15) items (eigen value= 4.24, % of variance= 9.9). The questionnaire reliability coefficients (Cronbach's α) of the questionnaire were (.84) for the academics factor, (.77) for social/ emotional factor, and (.88) for acceleration procedures.

4.2.2. The questionnaire of evaluation full -year acceleration by accelerated students.

To evaluate a full- year acceleration by accelerated students, the researcher developed a questionnaire

of (8) items. Answers were evaluated on a five-point Liker scale extending from strongly agrees (5) to strongly disagree (1). The questionnaire was managed to a sample of 100 accelerated students (Males=48, Females =52). To measure the validity of the questionnaire, a confirmatory factor analysis was used. For the CFA, the questionnaire's fit indices were observed to be in good fit $\chi^2/df = 2.13$, RMSEA = 0.062, GFI = 0.93, AGFI = 0.91, NFI = 0.93. The questionnaire's coefficients of reliability (Cronbach's α) were 0.88.

5. Results

A statistical standard was developed for ordering the academic acceleration questionnaire items by their severity and for evaluating mean scores as shown in table (2):

Table 2. Means score interpretation of questionnaire acceleration items

Rang	Degree of agreement	Degree of obstacles of creative teaching
1-1.8	Strongly Disagree	Very weak
1.81-2.60	Disagree	Weak
2.61-3.40	I can not deice	Medium
3.41- 4.20	Agree	Strong
4.21-5	Strongly agree	Very strong

The researcher answers questions about According to statistical standards

5.1. What is the evaluation of teachers and supervisors of the full- year acceleration regard to academic dimension? To answer this question means, and standard deviations were calculated in descending order for each item of the academic dimension of the academic acceleration questionnaire as shown in Table (3)

Table 3. shows means, standard deviations and descriptions for academic dimension:

Items	1	2	3	4	5	M	SD	level of agreement
1. Accelerated students have a higher academic level than non-accelerated students.	-	1	4	70	61	4.41	.589	Very strong
2. Accelerated students mastered faster and more efficiently than non-accelerated content and skills.	-	4	4	73	55	4.31	.674	Very strong
3. To accommodate the largest segment of gifted students, various acceleration strategies need to be enabled.	1	2	6	78	49	4.26	.68	Very strong
4. Enrichment information should be provided to accelerated students.	-	2	12	76	46	4.22	.663	Very strong
5. Themes such as creativity, innovation, and thinking skills should be taught to accelerated students.	-	1	11	84	40	4.19	.606	Strong
6. Psychological tests need to be undertaken to measure the effectiveness of acceleration.	1	2	5	91	37	4.18	.635	Strong
7. Before acceleration, an in-depth study should be carried out for the accelerated student.	-	4	13	83	36	4.10	.587	Strong
8. The method of academic acceleration increases education quality.	-	2	11	94	29	4.11	.685	Strong

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		1	2	3	4	5	M	SD	
9.	He can gain more experience and knowledge by having an academically accelerated student with older students.	1	3	15	91	26	4.01	.677	Strong
10.	It should be taken into account as students accelerate their English language skills.	-	10	13	78	35	4.01	.807	Strong
11.	The acceleration test should rely on integrated knowledge and skills, such as mathematics and science.	3	11	8	75	39	4	.935	Strong
12.	Academic acceleration is more effective than other ways to support gifted students.	1	23	28	57	27	3.63	1.01	Strong
	Total						4.123	0.711	Strong

Strongly disagree=1, Disagree= 2, I cannot decide=3, Agree= 4, strongly agree= 5

The evaluation of teachers and supervisors of the full- year acceleration in regard to academic dimension, in general, was strong, as the mean of total responses in this dimension was 4.123, SD= 0.711. In this dimension, Respondents' responses to items 1 to 4 were very strong, with the mean varying from 4.41 to 4.22. The item "Accelerated students have a higher academic level than non-accelerated students" ranked first, averaged 4.41, SD=0.589 and (61) teachers and supervisors are very strongly in agreement with this item. Then the item" Accelerated student mastered faster and more efficiently than non-accelerated content and skills " ranked second, averaged 4.31, SD=0.674 and (55) teachers and supervisors are very strongly in agreement with this item. Respondents'

responses to items 5 to 12 were strong, with the mean varying from 4.19 to 3.63. The last ranked the item" Academic acceleration is more effective than other ways to support gifted students ". Averaged 3.63, SD=0.711 and (27) teachers and supervisors are very strongly in agreement with this item.

5.2. What is the evaluation of teachers and supervisors of the full- year acceleration regard to social-emotional dimension? To answer this question means, and standard deviations were calculated in descending order for each item of the social-emotional dimension of the academic acceleration questionnaire as shown in Table (4)

Table 4. shows means, standard deviations and descriptions for social-emotional dimension

Items	1	2	3	4	5	M	SD	level of agreement
1. Teachers and supervisors of the accelerated students should be sufficiently prepared to help them adapt to the new level.	-	1	2	50	83	4.58	.565	Very strong
2. The advantages of acceleration should be made known to parents and students.	-	1	4	62	69	4.46	.595	Very strong
3. Teachers and supervisors will help improve the acceptance of accelerated students in the class to which they have accelerated.	-	1	6	82	47	4.28	.582	Very strong
4. The acceleration increases the motivation of students and enhances achievement.	1	1	6	86	42	4.22	.632	Very strong

5. Accelerated students prefer to get in touch with older students.	2	3	19	82	30	3.99	.765	Strong
6. Acceleration helps accelerated students to be more mature than their peers emotionally and socially.	1	7	23	83	22	3.86	.768	Strong
7. Accelerated students easily and quickly integrate with older students.	1	10	28	87	10	3.83	.694	Strong
8. The method of acceleration takes into account individual differences among students.	1	20	19	81	15	3.65	.889	Strong
9. Teachers and supervisors should be prepared to help students adapt to the new stage and solve their problems.	9	36	24	62	5	3.13	1.059	medium
10. Accelerated students suffer as they accelerate from stress and anxiety.	7	44	26	55	4	3.03	1.029	medium
11. Accelerated students feel stressed because they are tasked.	12	41	26	55	2	2.95	1.06	medium
12. Some of the accelerated students are over-confident.	12	54	34	33	3	2.71	1.003	weak
13. For fear of the negative impact of acceleration, parents refuse to nominate their children for the acceleration program.	18	90	16	9	3	2.18	.8273	weak
14. Academic acceleration is suitable for some students.	33	86	12	4	1	1.92	.716	Weak
Total						3.503	0.795	medium

The evaluation of teachers and supervisors of the full- year acceleration concerning social-emotional dimension, in general, was medium, as the mean of total responses in this dimension was (3.506) SD= 0.795. The responses of the respondents to items 1 to 14 of the dimension varied. This is born out of the fact that the level of agreement ranged from very high to weak for all items ranged from 4.58 to 1.92. In this dimension, Respondents' responses to items 1 to 4 were very strong, with the mean varying from 4.58 to 4.22. Respondents' responses to items 5 to 8 were strong, with the mean varying from 3.99 to 3.65. Respondents' responses to items 9 to 11 were moderate, the mean varying from 3.4 to 3.66. Moreover, Respondents' responses to items 12 to 14 were weak, the mean varying from 2.71 to 1.92. The item "Teachers and supervisors of the accelerated students should be sufficiently prepared to help them adapt to the new level" ranked first, averaged 4.58, SD=0.556 and (83) teachers and supervisors are very strongly in agreement with this item. Then the item" The advantages of acceleration should be made known to parents and students " ranked second, averaged 4.46, SD=0.595 and (69) teachers and supervisors are very strongly in agreement with this item. The last ranked the item" Academic acceleration is suitable for some students". Averaged 1.92, SD=0.716 and (1) teacher is weakly in agreement with this item.

5.3. What is the evaluation of teachers and supervisors of the full- year acceleration in regard to acceleration procedures dimension? To answer this question means and standard deviations were calculated

in descending order for each item of the acceleration system and procedures dimension of the academic acceleration questionnaire as shown in Table (5)

Table 5. shows means, standard deviations and descriptions for each item of the acceleration system and procedures dimension

Items	1	2	3	4	5	M	SD	level of agreement
1. There is insufficient time for students to prepare for acceleration exams.	-	1	5	74	56	4.36	.592	Very strong
2. At the beginning of the academic year, the candidates for acceleration must be revealed.	1	2	5	91	37	4.18	.635	Strong
3. Both the parent and the student accelerator must agree to accelerate.	1	4	7	83	41	4.16	.715	Strong
4. The criteria for admission to an acceleration program for students is very high and excludes those who want to accelerate.	-	4	11	85	36	4.12	.672	Strong
5. The system of academic acceleration improves teachers ' efficiency in serving accelerators.	-	8	20	78	30	3.95	.778	Strong
6. The acceleration test date is not the same each year	-	16	23	74	23	3.76	.871	Strong
7. The academic acceleration electronic system is accurate and flexible.	1	23	35	65	12	3.47	.902	Strong
8. Students should not be admitted to the Acceleration Program based solely on achievement and ability tests.	14	34	27	47	14	3.09	1.192	Medium
9. Accelerators are continuously evaluated to track their progress in the program of acceleration.	9	41	25	56	5	3.05	1.063	Medium
10. Flexibility and renewal describe the program of academic acceleration in Saudi Arabia.	14	42	19	51	10	3.01	1.183	Medium
11. The acceleration program should allow more students to be admitted.	22	71	22	16	5	2.34	1.006	Weak
12. The score of 98% on the achievement test as a student admission criterion is very high and should be reduced.	21	75	25	14	1	2.25	.869	Weak
13. I think the best way to reduce the cost of caring for the gifted is academic acceleration.	18	76	38	4	-	2.21	.704	Weak
14. The timing of the second-semester tests for acceleration testing puts pressure on the student and his family.	52	73	9	2	-	1.71	.654	Weak

				3.28	.855	Medium
Total						

The evaluation of teachers and supervisors of the full- year acceleration in regard to acceleration procedures dimension, in general, was medium, as the mean of total responses in this dimension was (3.28) SD= 0.855. The responses of the respondents to items 1 to 14 of the dimension varied. The level of agreement ranged from very high to weak for all items ranged from 4.36 to 1.71. In this dimension, Respondents' responses to item 1 were very strong, the mean was 4.36. Respondents' responses to items 2 to 7 were strong, with the mean varying from 4.18 to 3.47. Respondents' responses to items 8 to 10 were moderate, the mean varying from 3.09 to 3.01. Moreover, respondents' responses to items 11 to 14 were weak, the mean varying from 2.34 to 1.71. The item "There is insufficient time for students to prepare for acceleration exams" ranked first, averaged 4.36, SD=0.592 and (56) teachers and supervisors are very strongly in agreement with this item. Then the item" At the beginning of the academic year, the candidates for acceleration must be revealed " ranked second, averaged 4.18, SD=0.635 and (37) teachers and supervisors are strongly in agreement with this item. The last ranked the item" The timing of the second-semester tests for acceleration testing puts pressure on the student and his family". Averaged 1.71, SD=0.654 and (2) teachers supervisors are weakly in agreement with this item.

5.4. What is the evaluation of accelerated students of the full- year acceleration? To answer this question means and standard deviations, and t values were calculated for male and female for each item of the questionnaire as shown in Table (6)

Table 6. shows means, standard deviations and t values for each item of the questionnaire

Items		N	Mean	Std. D	t	sig
I wish I could accelerate more	Male	48	3.88	1.33	2.101	.038
	Female	52	4.37	.991		
Since accelerating, I'm pleased with my current situation	Male	48	3.82	1.231	1.983	.050
	Female	52	4.25	.967		
I feel prepared to be accelerated	Male	48	3.54	1.147	2.82	.006
	Female	52	4.12	.877		
For my new class, I need help or tutorials on the same subject	Male	48	2.85	1.352	2.329	.022
	Female	52	2.23	1.322		
I study more for my new class than I did in my last class	Male	48	2.33	1.208	.592	.555
	Female	52	2.19	1.172		
I am studying more than I used to	Male	48	2.27	1.251	.973	.333
	Female	52	2.03	1.136		
I wish I was accelerated on some subjects	Male	48	2.15	1.368	1.141	.257
	Female	52	1.85	1.258		
I wish I had not been accelerated	Male	48	2.39	1.143	2.124	.036
	Female	52	1.92	1.081		

As shown in the table. 6 On average, these statements were rated by students as the most important consideration in accelerating a student's decision. Statements expressed aspects of acceleration, which the participants felt would be beneficial for the accelerating student. The three highest-rated statements, "I wish I could accelerate more" (males: M = 3.88, SD = 1.33, females: M = 4.37, SD = 0.991) , then "Since accelerating, I'm pleased with my current situation" (males: M = 3.82, SD = 1.231, females: M = 4.12, SD = 0.877) and " I feel prepared to be accelerated" (males: M = 3.54, SD = 1.208, female: M = 4.25, SD = 0.967) ; In these three items, there were statistically significant differences in the evaluation of acceleration in favor of females, where the t values were (2.101, 1.983, 2.82) which were significant at 0.05. Particularly, these were the only three statements in the 8 rankings, with an average rating of importance above 4. The idea that accelerated students wished "had not been accelerated" had the lowest rating (males: M = 2.39, SD = 1.143, females: M = 1.92, SD = 1.08).

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Figure. 3 shows the percentages of responses between males and females in the research sample in the 8 items:

Percentage of Male Responses to the Questionnaire

■ strongly agree ■ agree ■ I can not decide ■ disagree ■ strongly disagree

31.3	25	29.2	8.36.3	I wish I had not been accelerated
29.2	43.8	6.310.410.4		I wish I was accelerated on some subjects
117	603	6.265.8		I wish I could accelerate more
12.56.310.4	35.4	35.4		Since accelerating, I'm pleased with my…
8.310.410.4	58.3	12.5		I feel prepared to be accelerated
37.5	27.1	18.8	8.38.3	I study more for my new class than I did in…
27.1	18.9	18.8	20.8	14.6	For my new class, I need help or tutorials on…
48	27.1	6.38.310.4		I'm studying more than I used to

Percentage of Female Responses to the Questionnaire

■ strongly agree ■ agree ■ I can not decide ■ disagree ■ strongly disagree

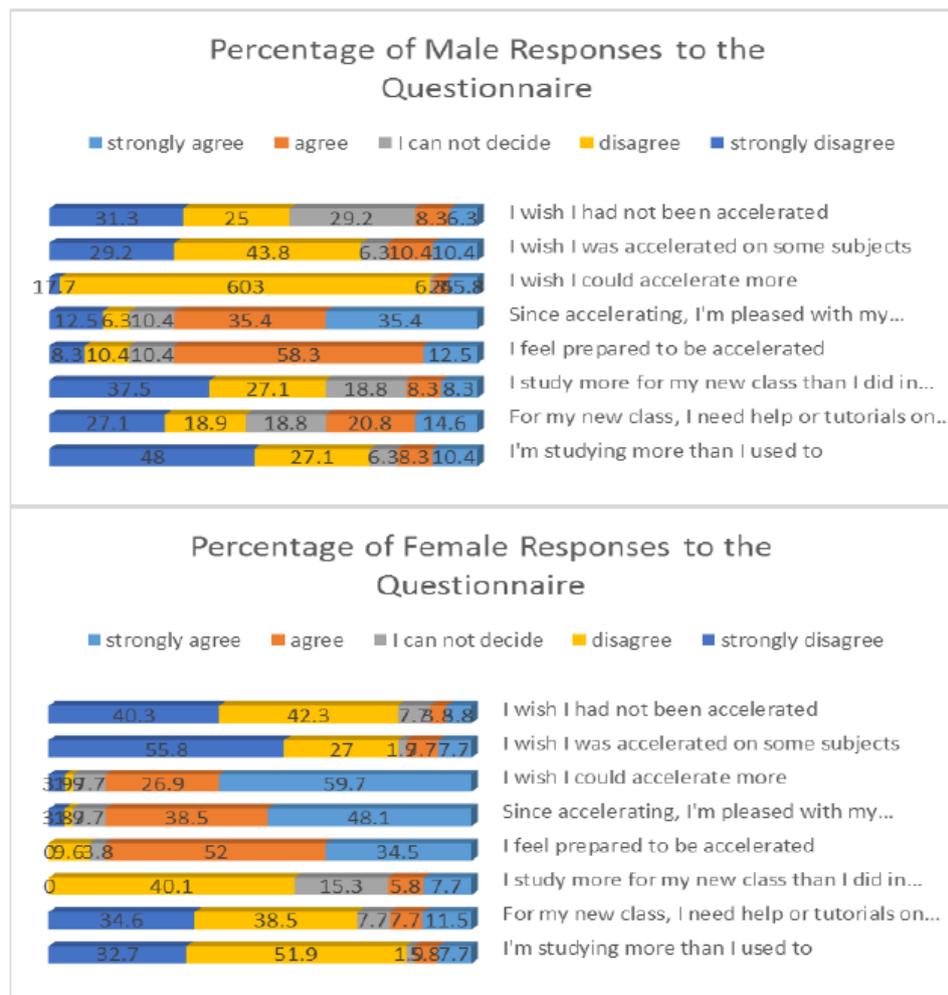|				
40.3	42.3	7.3.8.8		I wish I had not been accelerated
55.8	27	1.9.77.7		I wish I was accelerated on some subjects
3199.7	26.9	59.7		I wish I could accelerate more
3189.7	38.5	48.1		Since accelerating, I'm pleased with my…
09.63.8	52	34.5		I feel prepared to be accelerated
0	40.1	15.3	5.8	7.7	I study more for my new class than I did in…
34.6	38.5	7.77.711.5		For my new class, I need help or tutorials on…
32.7	51.9	1.5.87.7		I'm studying more than I used to

Figure3. Percentage of male and female responses to the acceleration questionnaire

As shown in figure.3 both males and females rated the set of eight statements.Concer-ning the item "I wish I had not been accelerated," 6.3% of males and 5.8% of females answered strongly agree, while, 32.7% of males and 40.3% of females answered strongly disagree. Regarding the item " I wish I was accelerated on some subjects "10.4% of males and 7.7% of females answered strongly agree. While, 43.8% of males and 27% of females answered disagree, and 29.2% of males and 55.8% of females answered strongly disagree. Regarding the item, "I wish I could have accelerated more" 45.8% of males and 59.7% of females answered strongly agree. While 17.7% of males and 3.9% of females answered strongly disagree.

Regarding the item, "Since accelerating, I'm pleased with my current situation"35.4% of males and 48.1% of females answered strongly agree, on contracts, 12.5% of males and 3.8% of females answered strongly disagree. The item" I feel prepared to be accelerated" was answered agree by 58.3% of males and 52% of females. While 8.3% of males and none of the females answered strongly disagree. Concerning the item " I study more for my new class than I did in my last class" 8.3% of males and 7.7% of females answered strongly agree, while, 37.5% of males and 30.7% of females answered strongly disagree. Regarding the item " For my new class, I need help or tutorials on the same subject "14.6% of males and

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11.5% of females answered strongly agree. While 27.1% of males and 34.6% of females answered strongly disagree. Finally, regarding the item, I am studying more than I used to "10.4% of males and 7.7% of females answered strongly agree. While, 48% of males and 32.7% of females answered strongly disagree, and 27.1 of males and 51.9% of females answered disagree.

6. Discussion

This study showed how teachers and supervisors e valuate acceleration. This study
further demonstrated how accelerated students ass ess their experience with acceleration . To achieve this goal two questionnaires were prepared. The first questionnaire was developed to evaluate a full-year acceleration by teachers and supervisors and consisted of three aspects of acceleration: academic, emotional/social, and acceleration procedures. While the latter developed to evaluate a full- year acceleration by accelerated student. The study results showed that teachers and supervisors generally have positive evaluation of academic acceleration, and indicated that acceleration of students has many advantages and benefits. This result was similar to the results of several studies which confirmed the positive effect of acceleration on the accelerated students ' academic achievement (Southern, Jones, & Fiscus, 1989; Hoogeveen, et al., 2005; Goodhew, 2009; Wells, et al., 2009; Colangelo et al., 2010; Lee, et al., 2010; Rogers, Smith, 2010; Siegle, et al., 2013; Schwartz, 2016; Masoud, 2017; Dare & Nowicki, 2018; Sheppard, 2018). Teachers and supervisors in the current study also claim that accelerated students have an academic level compared to non-accelerated students. They also can develop their skills over their regular peers at a higher rate. Similar results have been found in the Wells, et al., (2009), which showed that students with exceptional abilities cannot keep up with regular students. The results showed that teachers and supervisors believe that it is not adequate to use academic ability and achievement tests to identify students for acceleration programs. Rather tests that assess non-cognitive aspects such as tests for psychological competence, self-efficacy, and self-esteem should be used. Sheppard (2018) indicated that despite the widespread hesitation of many teachers and supervisors, many studies have shown that acceleration has a positive impact on students of high level. Many teachers did not feel they had been properly trained to identify and meet the needs of the accelerated students.

Although previous research indicates, acceleration has little influence on socio-emotional measures (Neihart, 2007), research results indicate that acceleration has social benefits for gifted students identified based on cognitive, social and emotional maturity but could be detrimental to unqualified students who have accelerated arbitrarily by looking at IQ, achievement or social maturity (Al-Abed,2009)..

Regarding the emotional-social aspect of academic acceleration, on the other hand, the study results showed a strong agreement that both the teachers and supervisors who work with the accelerated students should be prepared enough to be able to help these advanced students adapt to the new stage. This result is similar to the study in Jarwan, which suggested that teachers should also receive additional support to improve student acceptance (2009). The study results also revealed a strong agreement between teachers and supervisors on this matter. "The advantages of acceleration should be made known to parents and students". This finding was consistent with the results of several studies that showed that parents of gifted students declined to accelerate their children because of their fear of acceleration's negative effects (Colangelo & Assouline, 2009; Jarwan & Majalli, 2009; Ersoy& Ugur, 2017). The results showed that the item "The acceleration increases the motivation of students and enhances achievement" was also strongly agreed by teachers and supervisors, similar to the Al Ghamdi study (2017), which indicated that acceleration had a positive effect on student motivation. This result also corresponds to the study by Rogers (2002), which shows that academic acceleration improves the achievement of academically gifted students and therefore does not adversely affect their emotional or social school adaptation.

Despite teachers and supervisors evaluating in current study ranked barriers to acceleration procedures highly such as the strict criteria to accept students in acceleration programs and insufficient time for students to prepare for acceleration tests, they agree that the education system should allow more students to accept the acceleration program.
In our research, the students were responsive to a v ariety of statments regarding acceleration. In the decision to accelerate these participants are important considerations, and by definition, acceleration should be "based on readiness and motivation" (National Association for Gifted

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Children, 2004). The accelerated students have differing evaluation of acceleration. While some of these participants highlighted satisfaction with the decision to accelerate such as" Since accelerating, I'm pleased with my current situation " and " I feel prepared to be accelerated". As Vialle, Ashton, Carlon, & Rankin (2001) indicated in his study, most students experienced boredom, frustration, and physical symptoms before acceleration, however, felt more emotionally and socially content, and more confident and pleased with themselves after the acceleration.

7. Conclusion

This paper focused on academic acceleration as one of the most efficient methods to respond to gifted students ' needs. Many researchers advocate the great advantages that academic acceleration brings to students providing them with outstanding achievement and higher abilities. The results of the study revealed primarily that acceleration is an effective strategy in gifted education. Educators express their fear of the negative effects of academic acceleration, especially on the emotional and social aspects of the acceleration experienced by the students. Despite most educators' widespread reticence, several studies have shown that acceleration has a positive effect on high-level students. Research results indicate that acceleration has social benefits for gifted students identified based on cognitive, social and emotional maturity but could be detrimental to unqualified students who have accelerated arbitrarily by looking at IQ, achievement or social maturity. The evaluation of teachers and supervisors of accelerated students in general about the academic dimension of the acceleration questionnaire was high, while their evaluation was average concerning the dimensions of emotional-social and accelerating procedures. From the viewpoint of students in integrated classes, the results through our research provide an insight into evaluation regarding acceleration for high-skill students. Participants expressed a variety of ideas on acceleration. Although a very low percentage of students desired no acceleration, the majority were very satisfied with the acceleration experience.

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