Perfectionism among talented students and its relationship to their Self-Esteem

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Abstract

This study aimed to investigate perfectionism among talented students and its relationship to their self-esteem. Eighty-nine male and female talented students in King Abdullah II Schools for Excellence in Jordan were administered. Big Three Perfectionism Scale and Self-Esteem Scale to Rosenberg were used based on arithmetic mean, standard deviations, *T*-test for independent samples and Pearson correlation. The results indicate that the levels of three types of perfectionism and self-esteem are medium among students of King Abdullah II Schools for Excellence; also, there are no statistically significant differences between male and female students on Rigid Perfectionism and Narcissistic Perfectionism, while there are statistically significant differences between male and female students in Self-Critical Perfectionism and there are no statistically significant differences for Pearson Correlation to Rigid Perfectionism and Narcissistic Perfectionism on self-esteem; however, there are negative statistically significant differences for Pearson Correlation to Self-critical Perfectionism on self-esteem.

Keywords: Perfectionism, self-esteem, talented students.

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Introduction

1.1. Conceptual Framework

Talented students are characterized by a clear motivation in their general behavior towards achievement, perseverance and ambition in order to achieve their goals in life and success in it, which makes them feel self-sufficiency and happiness, ability to self-control, control their emotions in difficult situations, accept criticism directed at them and characterized by initiatives and audacity. They also have the confidence of others, high confidence in themselves, less willing than ordinary students to show behavior, realistic in their behavior and objective in their rulings and opinions (David, Moon & Feldhusen, 1998; Smith, Schneider & Ruck, 2005). The talented are also distinguished by a tendency to perfectionism, self-accountability, idealism, strong sense of justice and truth, strength of emotional feelings, increased sensitivity, power of self-awareness, leadership in various fields, tolerance of risk on various issues, early moral maturity and ability to psycho-social adaptation (Al-Surur, 2003; Jarwan, 2008). The talented category is considered one of the groups that are vulnerable to falling into perfectionism, where fear of failure is a motive to direct their behaviour and motivate them to achieve, which leads them to procrastination and hesitation to avoid mistakes, no matter how small (John & April, 2017), where academic achievement is seen as an indication of success from an early age, and this is reinforced by the culture of the educational system to which talented students belong to doing work free from errors and faults (Damianl, Negru-Subtrica, Pop & Baban,2016).

King Abdullah II Schools for Excellence is considered one of the pioneering schools that embrace talented and distinguished students in the various governorates of the Jordan, as it provides enriching educational patterns, and seeks to provide specialized educational services aimed at developing the educational process for talented and distinguished students so that it meets their different needs that encourage them to reach their creativity and excellence .The establishment of King Abdullah Schools of Excellence came from the interest of His Majesty King Abdullah II to provide an opportunity for gifted students to maximize their energies, and invest in the progress of the country and the importance of giving this category a special attention.

The Ministry of Education in Jordan hopes that these schools will become a nucleus to transfer their impact to regular schools and motivate them to take the initiative in dealing with students with special needs who are gifted. According to international educational statistics, the percentage of gifted and distinguished students in any educational system ranges between 2% and 3%. It is expected in the light of this percentage that there will be approximately 120,000 talented and distinguished students in the schools of the Ministry of Education. According to the educational data on programs and how to be admitted to these schools, the target group is represented by the seventh primary grade students chosen from the sixth basic grade so that they are accepted and selected according to several standers and criteria, in addition to highlighting creative student productions, research, projects and school reports. The nature of working hours in these schools differs from those of regular schools, so that the school hours start from eight AM to four PM and so that the student studies 40 lessons per week during which the Jordanian school curriculum is taught at the standard level and the development curriculum .Teaching staff in these schools have a set of administrative and technical conditions, the most important of which is to hold a master's or doctorate degree, excellence in job performance through contributions and creations in his field of education and passing a specialized interview to measure different aspects of personality such as motivation, leadership, ability to persuade, emotional balance and foresight. The school programs and plans are developed at an advanced level and criteria so that the teacher expands to provide it according to the needs, desires and attitudes of students by focusing on supportive activities for the school curriculum and compulsory classes in all subjects taught by the

student that are a requirement for the goals of success, transition from one class to another and student participation in local and international activities and competitions (Alshurman & Alkhateeb, 2015).

Perfection can be a blessing or a curse at the same time. Ideal work is often desirable because it leads to positive evaluations of the results; however, ideal work cannot always be achieved, which leads to a feeling of ridicule and it may be developed into clinical symptoms such as eating disorder, obsessive-compulsive disorder, mental and physical syndromes, and anxiety disorders (Park, Kim, Jo, Lee & Woo, 2017). The perfectionist character is described as a personality that seeks to reach a goal free from errors within high standards, or a personality characterized by the struggle to achieve perfection (incapacity idealism) and accompanied by exaggerated criticism of the self and fears of the valuations of others, or that it contains a bleak side that tends to be hostile to society, narcissism and excessive criticism of self and others. In all the cases, perfectionism has two types, one of which is positive and the other is negative (Besharat, Pourhosein, Rostami & Bazzazian, 2010; Stoeber, 2015; Stoeber & Childs, 2010). People with a high degree of perfection suffer from not feeling good enough about their personal performance, and feeling pessimistic, anxious, stress, remorse and stiffness, which negatively affects their motivation, self-confidence and self-esteem (Ablard & Parker, 1997).

Perfectionism has many definitions. It was defined by Burns (1980) as setting irrational, elevated levels and self-criticism when these levels are accomplished. Stoeber (1998) defined it as making any simple mistake as a complete defect, and the desire to reach high levels of performance which leads to slow performance and often leads to repetition, in order to reach perfection for each step of the accomplished task, and the focus is not only the final result but also the accuracy of each step of the task. Lee (2007) also defined it as the struggle without mistakes, setting excessive levels of performance and a tendency towards self-criticism. Adkins and Parker (1996) identify two types of perfectionism, first: normal perfectionism, in which the individual feels real happiness through the completion of difficult tasks, feels satisfied with the quality and performance of his performance, appreciates himself positively, is happy with his level of performance and skill, admires his prowess and sets himself appropriate levels with his abilities and capabilities. Second: neural perfectionism, in which the individual sees his work is not good despite its quality, and the best must be obtained continuously, and this is accompanied by his feeling of dissatisfaction and sets himself inaccessible levels cannot reach with his abilities and feeling of constant fear of failure.

Flett and Hewitt (2002) identified three forms of perfectionism, first: self-directed perfectionism, in which an individual sets himself high standards of performance and tries to achieve them, and some of them are positive so that it represents a driving force to achieve high goals, and the other is negative that causes frustration, loss of motivation and sometimes suicide. Often, self-directed perfectionism directs individuals to their needs for achievement rather than their fear of failure. Second: perfectionism directed towards others: The perfected person sets high standards for those around him, asks them to achieve it, forces them to apply it and evaluate them based on it. Third: socially acquired perfectionism, which is acquired by the individual from his awareness of the social situations that surrounding him, and he believes that they expect him to perform ideally or completely and they put high standards on him above his ability, accompanied by fear of failure, negative evaluation of performance and some psychological disorders.

The degree of perfection can be measured with a multidimensional scale, for example, the Multidimensional Perfectionism Scales by Frost, Marten, Lahart and Rosenblate (1990; Frost Multidimensional Perfectionism Scale) and Hewitt and Flett (2004; Hewitt–Flett Multidimensional Perfectionism Scale) and Smith, Saklofske, Stoeber and Sherry (2016; the Big Three Perfectionism Scale

[BTPS]). We will review the BTPS scale because we will use it in this study and it is considered a new measure of perfectionism.

The BTPS first global factor is labelled rigid perfectionism. This label was inspired by the subscale of the same name from the Personality Inventory for the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5; American Psychiatric Association, 2013; Krueger, Derringer, Markon, Watson & Skodol, 2013; see Stoeber, 2014), and it is composed of two facets: self-oriented perfectionism and self-worth contingencies. Self-oriented perfectionism refers to the belief that striving for perfection, as well as being perfect, are important (Hewitt & Flett, 1991; Stoeber & Childs, 2010). Self-worth contingencies refer to the tendency to base self-worth on self-imposed perfectionistic standards (DiBartolo, Frost, Chang, LaSota & Grills, 2004; Sturman, Flett, Hewitt & Rudolph, 2009).

 The BTPS' second global factor is self-critical perfectionism. This label was developed depending on operationalized self-critical perfectionism following the model proposed by Dunkley, Zuroff and Blankstein (2003) in which self-critical perfectionism subsumes four facets: concern over mistakes, doubts about actions, self-criticism and socially prescribed perfectionism. Concern over mistakes is the tendency to have overly negative reactions to perceived setbacks and failures (Frost, Marten, Lahart & Rosenblate, 1990). Doubts about actions reflect uncertainties about performance (Frost et al., 1990). Self-criticism measures the tendency to engage in harsh self-criticism when performance falls short of perfection (Dunkley et al., 2003). Socially prescribed perfectionism denotes a tendency to perceive others as demanding perfection (Hewitt & Flett, 1991).

The third BTPS global factor is narcissistic perfectionism. Narcissistic perfectionism was operationalized following Nealis, Sherry, Lee-Baggley, Stewart and Macneil's (2015) model and is composed of four facets: other-oriented perfectionism, hypercriticism, entitlement and grandiosity. Other-oriented perfectionism is the tendency to hold unrealistic expectations for others (Hewitt & Flett, 1991). Hypercriticism involves harsh devaluation of others and their imperfections (Nealis et al., 2015). Entitlement refers to the belief that one is entitled to perfect or special treatment (Nealis et al., 2015). Grandiosity denotes a sustained view of oneself as perfect or superior to others (Flett, Sherry, Hewitt & Nepon, 2014; Nealis, Sherry, Lee-Baggley, Stewart & Macneil, 2016; Stoeber, Sherry & Nealis, 2015).

Self-esteem is defined as a person's self-assessment of himself, his capabilities and his traits in various psychological fields, including his respect and self-acceptance (Weiner & Craighead, 2010; Wadman & Conti-Ramsden, 2008; Woolfolk, 2001). The characteristics of self-esteem change from childhood to old age. In childhood, self-esteem is relatively high, and it decreases during adolescence, then returns to rise gradually in adulthood and then decreases sharply in the old age (Robins & Trzesniewski, 2005).

Self-esteem in adolescence is greatly affected by the nature of the relationship with peers; for males, it is related to competition and individual achievements, but for females, it is related to relationships with others (Stickle, 2007). The level of self-esteem is influenced by experiences of success and failure, factors of socialization, participation in class activities and evaluation of other high standing persons. The positive experiences experienced by the individual develops a sense of security and self-confidence, which enhances the level of his self-esteem, while experiences of failure contribute to the low level of performance, low level of school achievement, poor social and psychological adjustment, decreasing in sense of security and his inferior feeling enhances his low self-esteem (Bleeker, Evans, Fisher & Miller, 1998; Di Paula & Campbell, 2002).

People with high self-esteem are characterized by the speed of integration and affiliation wherever they are / self-sufficiency / feeling of self-worth / ability to face a challenge / ability to control themselves and control their lives / more productive / happiness and contentment in their lives / optimism and

realism / strength in facing problems of life / feelings of control power / constant response to challenges, while people with low self-esteem are always characterized by self-contempt / feeling guilty, even if there is no relationship with error / continuous apology for everything / belief in not deserving of this status or work and if others see it / insufficient feeling in roles and jobs / tendency to withdraw or modify their opinion for fear of ridicule and rejection of others / feeling alienated from the world / pessimism / deflation and introverted self (Malhi & Zerns, 2006). Rosenberg (1965) defined self-esteem as an evaluation to express the respect the individual holds for himself and which he maintains regularly because he expresses an acceptable or unacceptable trend towards the self. Also, he designed the Self-Esteem Scale as a unidimensional measure of global self-esteem.

The self-esteem scale is one of the most widely used instruments for measuring self-esteem in research settings. It was developed to assess global self-esteem. It focuses on people's general feelings towards themselves, without referring to any specific quality or attribute. Half of the items are worded in a positive direction, and the other half are worded in a negative direction.

1.2. Related Research

Flett, Hewitt, Oliver and Macdonald (2002) assert that giftedness is a group of perfectionists who suffer from misalignment as a result of their perfectionism. It is represented by their low level of self-esteem, academic delay and their suffering of some social and emotional disturbances.

Rice and Lopez (2004) explain that high achievers have a high degree of self-oriented and socially acquired perfectionism. It can be explained by failure in early school years and lack of experience. Some of the high achievers tend to achieve perfection by setting high standards for their actions and behaviours, thinking about obtaining everything or nothing, their standards are sometimes unattainable or unreasonable, and they compulsively strive to achieve their impossible goals and establish themselves based on the achievement of high achievement. Those who excel feel the discipline and internal control, so they strive to achieve high-level goals, and they feel frustrated and powerless to not reach perfectionism. So perfectionism is undesirable, an obstacle to them when they refuse anything without perfectionism. They want to obtain a full mark in all subjects and the highest appreciation from teachers, parents and peers (Silverman, 2003).

Ayyash and Alamuddin (2007) study in Lebanon on gifted students in the curriculum, by applying the Rosenberg Self-Estimate Scale (RSE) to a sample that consisted of individuals from the age group of 17–24 years. The results showed that male adolescents have a high self-esteem and self-concept, and for females, they showed a low rating within their family.

Nepon, Flett, Hewitt and Molnar (2011) conducted a study on a sample of 155 undergraduate students at the university that aimed to study the relationship between neurological perfection resulting from negative evaluation from society and others with depression and social anxiety. The study tools included a multidimensional perfectionism scale, a self-esteem scale, a depression scale and a social anxiety scale. The results concluded that the blame, criticism and disapproval directed at the individual makes him vulnerable to criticism and disapproval by himself and others. This leads to the emergence of neurotic perfectionism, and there is also a correlation between neurological perfectionism directed at negative social evaluation from others and the occurrence of depression and social anxiety.

Melhem, Khazali and Momani's (2017) study aimed to reveal the prevailing pattern of an identity, the level of self-esteem, and the relationship between it among the students of King Abdullah II Schools of Excellence. The sample of the study consisted of 65 male and female students, who were chosen intentionally. To achieve the aim of the study, an identity pattern list (Berzonsky, 1992) and a scale of

self-esteem (Rosenberg, 1965) were used. The results of the study showed that the patterns of psychological identity were consecutive: informational, normative and avoiding. Also, the students 'level of self-esteem was average. The results also showed that there were no statistically significant differences between the patterns of psychological identity due to the sex and the level of self-esteem variables.

Kahraman & Bulut Peduk (2016) aimed to determine multiple Intelligences and perfectionism in Middle School Gifted Students. The sample of study was consisted from 181 sixth, seventh, and eighth grade gifted students'. A personal information form was implemented to obtain socio-demographic data. The results of the study showed that [verbal-linguistic intelligence, mathematical-logical intelligence and intrapersonal intelligence] [intrapersonal intelligence, mathematical-logical intelligence and verbal-linguistic intelligence] predicted 34% of the students' perfectionism levels. The explanatory power of the scores in multiple intelligences over negative perfectionism was not found to be statistically significant for any of the sub-dimensions.

AL-Momani and Bataineh's (2020) study aimed to find out the relationship between Perfectionism and Goal Orientation among Gifted Students in King Abdullah II Schools for Excellence. The sample of the study consisted of 184 students in seventh and eighth grades in King Abdullah II Schools for Excellence; Perfectionism and Goal Orientation scales were developed by the researchers. The results of the study showed that the level of perfectionism and the level of the types of goal orientation were high. The results indicated there was no statistically significant difference at the significance level of α = 0.05 in the strength of the correlation between perfectionism and the types of goal orientation due to the level of education and due to gender.

Mofield and Parker Peters (2018) revealed the relationship between mental beliefs, perfection and the method of achievement. The study group consisted of 416 students (ordinary and distinguished) from grades 6–8 in American schools, where they were chosen randomly. The results showed that there were no statistically significant differences in growth or mental beliefs about intelligence between the two groups. Talented students achieved higher grades in high standards and self-academic awareness compared to ordinary students. The results also showed that excellence was an indication of concern about errors, high standards, and academic self-efficacy.

1.3. Purpose of the Study

The talented and the distinguished have an effective role in building and developing the society; therefore, they must take care of them and help them as closely as possible, to maintain their superiority and enable them to overcome the problems faced by them (Jarwan, 2008). One of the problems that affects them is the perfectionism that leads individuals to try to achieve the incapacity of idealism, but it sometimes causes them to reach their goals, which causes their feeling of happiness, but the problem appears if one of them is not able to achieve these goals, which causes pressure on himself to achieve his goals and makes the individual to enter into a state of depression, sadness and blame himself severely (Summerfeldt, Antony & Swinson, 1999). Self-esteem greatly helps the choices and decisions that can be made by individuals, as it is more like a motivational factor that encourages a person to take care of himself and explore all his capabilities and skills, which leads to the continuous pursuit of specific goals and personal aspirations; in addition to that, self-esteem helps to get rid of feeling despair and failure (Baumeister, Campbell, Krueger & Vohs, 2003). Through the researchers 'experience in caring for gifted students and developing a new global scale for measuring the perfectionism BTPS (Smith et al., 2016), the study problem emerged to reveal the level of perfection and the level of self-esteem among

gifted students and determine the type of relationship between them. The Purpose of the study is summarised in answering the following questions

What is the level of three higher order global factors (rigid perfectionism, self-critical perfectionism and narcissistic perfectionism) among students of King Abdullah II Schools for Excellence?

What is the level of self-esteem among students of King Abdullah II Schools of Excellence?

Are there differences in the level of three higher-order global factors (rigid perfectionism, self-critical perfectionism and narcissistic perfectionism) among students of King Abdullah II Schools of Excellence due to the variable of student's gender?

Are there differences in the level of self-esteem of students of King Abdullah II Schools of Excellence due to the variable of student's gender?

Is there a correlation between the level of self-esteem and the level of three higher order global factors (rigid perfectionism, self-critical perfectionism and narcissistic perfectionism) among students of King Abdullah II Schools of Excellence?

1.4. Importance of the study

The study of the characteristics of gifted students, whether positive or negative, is of great importance, because this helps to invest their potentials and capabilities in developing their societies in all fields; they are better able to find solutions to problems, make decisions, manage conflicts and crises, and adapt to different situations faced by them (Jarwan, 2008). Due to the lack of Arab studies in the field of talented care, theoretically, this study acquires its importance by studying two variables (perfectionism and self-esteem) and their effect on gifted students in Jordan. Practically, the results of this study can help workers, decision-makers, officials, teachers and advisors in King Abdullah II Schools for Excellence in designing instructional programs and educational plans for gifted students in all developmental areas.

1.5. Procedural definitions of the study variables

Perfectionism: it is struggling without mistakes, setting excessive levels of performance and a tendency towards self-criticism Lee (2007), and it is determined by the marks obtained by the student on the scale of perfectionism (BTPS).

self-esteem: it is an evaluation to express the respect that the individual holds for himself and which he maintains regularly because he expresses an acceptable or unacceptable trend towards the self (Rosenberg, 1965), and is expressed by the marks obtained by the student on the scale of self-esteem.

gifted students: They are the tenth-grade students registered in King Abdullah II Schools of Excellence in the city of Irbid in the second semester from the academic year 2019–2020, and they meet the criteria for nomination and acceptance adopted by the Jordanian Ministry of Education for gifted students.

Method and procedures

2.1. Research Model

The relational descriptive model is used to determine whether there is a relationship between two research variables or not, in the case of a relationship; it shows the nature of that relationship, whether direct or inverse, the relational descriptive approach is useful in identifying the extent of the correlation between the two variables by reaching the degree or proportion of correlation, as well as the nature of the relationship is direct or inverse. It does not address the concept of cause and effect, in the simple

sense that it does not matter to know the independent variable (cause), or the dependent variable (result), but only the existence of the relationship.

2.2. Participants

The study sample included all tenth-grade students (89 male and female students) from King Abdullah II Schools of Excellence in the city of Irbid. Their ages ranged 15–16 years; for the second semester 2019–2020, the study tools were distributed to them electronically using Google Drive because of Corona virus that contributed to the interruption of the regular study in Jordan and resume it electronically (for remote studies).

2.3. Data collection tools

Two tools were used for Data Collection to answering study questions.

The BTPS to Smith et al. (2016). The BTPS is composed of 45 items rated on a Likert scale from 1 = strongly disagree to 5 = strongly agree that assesses three higher order global factors (rigid perfectionism, self-critical perfectionism and narcissistic perfectionism) via 10 lower order perfectionism facets. Rigid perfectionism: sum self-oriented perfectionism (SOP; 5 items 1, 10, 27, 29, 42) and self-worth contingencies (SWC; 5 items 16, 20, 23, 38, 40). Self-critical perfectionism: sum concern over mistakes (COM; 5 items 8, 17, 24, 35, 44), doubts about actions (DAA; 5 items 2, 11, 22, 25, 32), self-criticism (SC; 4 items 6, 18, 19, 26) and socially prescribed perfectionism (SPP; 4 items 5, 9, 34, 45). Narcissistic perfectionism: sum other-oriented perfectionism (OOP; 5 items 12, 36, 37, 39, 43), hypercriticism (HC; 4 items 3, 7, 30, 41), entitlement (ENT: 4 Items 13, 14, 28, 33) and grandiosity (GRAN: 4 Items 4, 15, 21, 31) (Smith, 2016). The validity of the apparent content of the BTPS for Jordan's environment was verified by presenting it to 10 faculty members with specialisation and experience in educational psychology, special education and English, in order to express their notes on the accuracy and validity of the BTPS content: clarity of the items after translating them into Arabic, linguistic formulation, and their suitability for measuring perfectionism from adding, modifying and deleting items.

The arbitrators' notes were only to some modified items of the scale linguistically. All items of the original scale were retained without deleting any of the 45 items which were distributed over three higher order global factors (rigid perfectionism, self-critical perfectionism and narcissistic perfectionism). The construct validity of the BTPS was extracted by applying it on a pilot sample consisting of 25 male and female students from King Abdullah II Schools of Excellence. The validity of the internal consistency of the BTPS was determined by calculating the Pearson correlation coefficient between the items and the type of perfectionism, and the overall value of the BTPS is available in Table 1. The Pearson correlation coefficient between each type of perfectionism and the overall value of the BTPS is shown in Table 2. The reliability of internal consistency: the internal consistency coefficient was calculated using Cronbach's alpha equation for the same pilot sample scores on the BTPS. The reliability of test-retest for BTPS was extracted by applying it on the pilot sample twice, with a two-week interval between them, and then the coefficient of reliability was calculated as shown in Table 3. To determine the level of perfectionism among the members of the study sample, the arithmetic mean was distributed as follows: (from 1 to 2.33) low level, (from 2.34 to 3.66) medium level and (3.67 to 5) high level.

Table 1. Pearson correlation coefficient between the items and the type of perfectionism, and the overall value of the BTPS

	Rigid perfectionism				Self-critical perfectionism				Narcissistic perfectionism		
Faces	Item NO	r1	r2	Faces	Item NO	r1	r2	Faces	Item NO	r1	r2
SOP	1	0.73**	0.59**	COM	8	0.59**	0.57**	OOP	12	0.64**	0.82**
	10	0.68**	0.69**		17	0.66**	0.54**		36	0.79**	0.65**
	27	0.72**	0.67**		24	0.81**	0.75**		37	0.89**	0.50**
	29	0.73**	0.60**		35	0.75**	0.72**		39	0.76**	0.82**
	42	0.70**	0.63**		44	0.74**	0.72**		43	0.54**	0.53**
SWC	16	0.78**	0.74**	DAA	2	0.63**	0.60**	HC	3	0.78**	0.63**
	20	0.62**	0.57**		11	0.73**	0.66**		7	0.63**	0.81**
	23	0.66**	0.58**		22	0.82**	0.74**		30	0.74**	0.62**
	38	0.81**	0.88**		25	0.73**	0.69**		41	0.79**	0.66**
	40	0.75**	0.79**		32	0.77**	0.73**	ENT	13	0.85**	0.82**
				SC	6	0.80**	0.69**		14	0.72**	0.58**
					18	0.85**	0.74**		28	0.58**	0.60**
					19	0.86**	0.68**		33	0.88**	0.59**
					26	0.88**	0.62**	GRAN	4	0.68**	0.56**
				SPP	5	0.79**	0.72**		15	0.89**	0.55**
					9	0.74**	0.59**		21	0.77**	0.58**
					34	0.73**	0.87**		31	0.57*	0.54**
					45	0.68**	0.65**				

N = 25. SOP= Self-oriented perfectionism; SWC = Self-worth contingencies; COM= Self-critical Concern over mistakes; DAA = Doubts about actions; SC = Self-criticism; SPP = Socially-prescribed perfectionism; OOP = Other-oriented perfectionism; HC = Hypercriticism; ENT = Entitlement; GRAN = Grandiosity; *r*1 = Correlation coefficient with field; *r*2 = Correlation coefficient with BTPS.

Table 2. Pearson correlation coefficient between each type of perfectionism and the overall value of the BTPS

Type of perfectionism	Rigid perfectionism	Self-critical perfectionism	Narcissistic perfectionism	value of BTPS
Rigid perfectionism	1	0.75**	0.69**	0.87**
Self-critical perfectionism		1	0.775**	0.92**
Narcissistic perfectionism			1	0.85**
Value of BTPS				1

All correlation coefficients are ranging from (0.50 to 0.92) and all values have a statistical significance **p < 0.01, which indicates there is an existence of validity of internal consistency for all items of the scale, which means the items measure what was set to measure it.

Table 3. Cronbach's alpha and test-retest coefficients for BTPS

Type of perfectionism	No of items	Reliability coefficient	
		Cronbach's alpha	test–retest coefficient
Rigid perfectionism	10	0.79	0.78**
Self-critical perfectionism	18	0.86	0.71**
Narcissistic perfectionism	17	0.81	0.73**
Value of BTPS	45	0.94	0.90**

Values of Cronbach's alpha ranges from 0.79 to 0.94 and the test-retest coefficient ranges from 0.71 to 0.90, with statistical significance at **$p < 0.01$, which mean the BTPS scale has reliability for applying it in our study in Jordan's environment.

Self-esteem scale to Rosenberg (1965) was used in our study. It was translated by Jaradat (2006), which consists of 10 items to measure general self-esteem among adolescents and adults. The response to positive items is through the ranking of a four-ladder Likert scale: (1) = strongly disagree to (4) = strongly agree; this ranking has been reversed for negative items**.** Jaradat (2006) has verified the significance of validity and reliability of the scale for the Jordanian environment, it has shown satisfactory validity and reliability. In the current study, the validity of the content for a scale was verified. By presenting the scale to a group of arbitrators consisting of 12 members, the teaching staff at the Faculty of Education at the University of Al-Bayt were asked to express an opinion on the scale in terms of the accuracy and integrity of the content linguistically, clarity of meaning and doing appropriate adjustments. Most of the arbitrators 'comments came to no more than reformulating a few of the sentences that were agreed upon 80% of the arbitrators or more. also, the reliability of the scale was extracted by applying it to the same pilot sample. The internal consistency equation was calculated using the Cronbach's alpha equation for the scale items as a whole. the reliability coefficient values reached 0.78 which represents an acceptable internal consistency for research study. In order to determine the level of self-esteem among the study sample, the arithmetic averages were distributed as follows: (from 1 to 2) low level, (from 2 to 3) medium level and (3 to 5) high level.

2.4. Data Collection Process and data analysis

Indications of validity and reliability were extracted for the study tools (perfectionism and self-esteem), after that the study tools were distributed on the study sample and then the data was processed using the SPSS program to answer study questions by calculating arithmetic averages, standard deviations, *t*-test for independent samples and Pearson coefficient. Also multiple regression analysis was used.

3. Results

To answer the first and second questions from the study questions, what is the level of three higher order global factors (rigid perfectionism, self-critical perfectionism and narcissistic perfectionism) among students of King Abdullah II Schools for Excellence? And what is the level of self-esteem among students of King Abdullah II Schools of Excellence? Arithmetic mean and standard deviations for students' answers were extracted, as shown in Tables 4 and 5.

Table 4. Arithmetic mean and standard deviations for Big Three Perfectionism

Type of perfectionism	N	Mean	Std. deviation	Level
Rigid perfectionism	89	2.99	0.460	Medium
Self-critical perfectionism	89	2.65	0.459	Medium
Narcissistic perfectionism	89	2.40	0.445	Medium
BTPS	89	2.68	0.360	Medium

Level of three types of perfectionism ranges from 2.40 to 2.99, which indicates medium level of perfectionism among students of King Abdullah II Schools for Excellence, as shown in Table 4.

Table 5. Arithmetic mean and standard deviations for self-esteem

	N	Mean	Std. deviation	Level
Self-esteem	89	3.17	0.405	Medium

Level of self-esteem is equal to 3.17, which means to indicate medium level of self-esteem among students of King Abdullah II Schools for Excellence, as shown in Table 5.

To answer the third and fourth questions from the study questions, are there differences in the level of three higher order global factors (rigid perfectionism, self-critical perfectionism and narcissistic perfectionism) among students of King Abdullah II Schools of Excellence due to the variable of student's gender? And, are there differences in the level of self-esteem of students of King Abdullah II Schools of Excellence due to the variable of student's gender? *T*-test for independent samples was calculated, as shown in Tables 6 and 7.

Table 6. *T*-test for independent samples for genders differences between the levels of three higher order global factors (rigid perfectionism, self-critical perfectionism, narcissistic perfectionism) among students of King Abdullah II Schools of Excellence.

Type of perfectionism	Gender	N	Mean	Std. deviation	T	Df	Sig. (2-tailed)
Rigid perfectionism	Male	50	2.93	0.471	−1.500	87	0.137
	Female	39	3.08	0.444			
Self-critical perfectionism	Male	50	2.56	0.408	−2.186	87	0.031*
	Female	39	2.77	0.504			
Narcissistic perfectionism	Male	50	2.40	0.441	0.211	87	0.833
	Female	39	2.38	0.460			
BTPS	Male	50	2.63	0.333	−1.606	87	0.112
	Female	39	2.75	0.390			

There are no statistically significant differences between male and female students on BTPS, Rigid Perfectionism and Narcissistic Perfectionism, while there are statistically significant differences between male and female students in Self-Critical Perfectionism. *p = 0.05.

Table 7. T-test for independent samples for genders differences between the levels of self-esteem among students of King Abdullah II Schools of Excellence

	Gender	*N*	Mean	Std. deviation	*T*	*D*f	Sig. (2-tailed)
Self-esteem	Male	50	3.24	0.395	1.746	86	0.084
	Female	39					

There are no statistically significant differences between male and female students on self-esteem. **p* = 0.05. To answer the fifth questions from the study questions, is there a correlation between the level of self-esteem and the level of three higher-order global factors (rigid perfectionism, self-critical perfectionism, narcissistic perfectionism) among students of King Abdullah II Schools of Excellence? Pearson correlation was calculated as shown in Table 8.

Table 8. Pearson Correlation between the level of self-esteem and the level of three higher-order global factors (rigid perfectionism, self-critical perfectionism, narcissistic perfectionism) among students of King Abdullah II Schools of Excellence

Type of perfectionism	N	R	Sig. (2-tailed)
Rigid perfectionism	89	0.037	0.734
Self-critical perfectionism	89	−0.473**	0.000
Narcissistic perfectionism	89	0.110	0.307
TPS	89	−0.151	0.158

There are no statistically significant differences for Pearson Correlation to Rigid Perfectionism and Narcissistic Perfectionism on self-esteem, but there are negative statistically significant differences for Pearson Correlation to Self-Critical Perfectionism on self-esteem.
**p = 0.01.

4. Discussion

The current study examined the level of perfectionism, the level of self-esteem among gifted students and determine the type of relationship between them from through answering five equation.

The first equation was to determines the level of three higher order global factors (rigid perfectionism, self-critical perfectionism and narcissistic perfectionism) among students of King Abdullah II Schools for Excellence? Table 4 shows the level of three types of Perfectionism ranging from 2.40 to 2.99, which indicates medium level of Perfectionism among students of King Abdullah II Schools for Excellence. The nature of the study stage for the members of the study sample (10th and 11th grades) can be explained from more than one point of view; therefore, students at this stage do not focus on perfection but rather focus on the search for identity (adolescence stage). As this stage is not crucial for them to determine their future as grade stage 12 (the end of the secondary stage and the transition to university study), the methods of socialisation practiced by parents, teachers and peers are less strict and more lenient, which makes the perfectionism for them a moderate degree. While most of the results of the previous studies indicated that the degree of perfection in the gifted was as high such as in AL-Momani and Bataineh (2020); Flett et al. (2002) and Nepon et al. (2011).

The second equations was to determine the level of self-esteem among students of King Abdullah II Schools of Excellence. Table 5 shows that the level of self-esteem equals 3.17, which indicates medium

level of self-esteem among students of King Abdullah II Schools for Excellence. It can be explained that the nature of stage for members of sample study (adolescence) was influenced by experiences of success and failure, factors of socialisation, participation in class activities and evaluation of other high standing (Bleeker et al., 1998; Di Paula & Campbell, 2002) which makes the self-esteem for them a moderate degree. The results of this question were consistent with the study by Melhem et al. (2017), while it differed with the results of the study by Ayyash and Alamuddin, (2007).

The third and fourth equations show the differences in the level of three higher order global factors (rigid perfectionism, self-critical perfectionism and narcissistic perfectionism) and self-esteem among students of King Abdullah II Schools of Excellence due to the variable of student's gender? Tables 6 and 7 show there are no statistically significant differences between male and female students on Rigid Perfectionism, Narcissistic Perfectionism and Self-Esteem. It is explained as follows: In adolescence for the gifted, they are significantly by influence, imitation, interaction and communication with each other, which makes males and females more similar. There are similarity in between male and female on belief that striving for perfection, tendency to base self-worth on self-imposed perfectionistic standards, tendency to hold unrealistic expectations, involves harsh devaluation of others, belief that one is entitled to perfect or special treatment and a sustained view of oneself as perfect or superior to others. These results are consisted with the results of a study by AL-Momani and Bataineh (2020); Melhem et al. (2017), while Table 6 shows statistically significant differences between male and female students in Self-Critical Perfectionism on behalf of female students rather than male students. It can be explained that in gifted female students, the tendency to have overly negative reactions to perceived setbacks and failures, the tendency to reflect uncertainties about performance, the tendency to engage in harsh self-criticism when performance falls short of perfection and the tendency to perceive others as demanding perfection are more compared to gifted male students. This result is in consistency with Ayyash and Alamuddin' (2007) study.

The fifth equation: is there a correlation between the level of self-esteem and the level of three higher-order global factors (rigid perfectionism, self-critical perfectionism, narcissistic perfectionism) among students of King Abdullah II Schools of Excellence? Table 8 shows there are no statistically significant differences for Pearson Correlation to Rigid Perfectionism and Narcissistic Perfectionism on self-esteem. It can be explained when we analysed the definition of self-esteem. Weiner and Craighead (2010); Wadman and Conti-Ramsden (2008) and Woolfolk (2001) defined that self-esteem is as a person's self-assessments of himself, his capabilities and his traits in various psychological fields, Including his respect and self-acceptance that approximately interact with the definition of Rigid Perfectionism and Narcissistic Perfectionism. Table 8 also shows that there are negative statistically significant differences for Pearson Correlation to Self-Critical Perfectionism on self-esteem. It can be explained that when there is an increase in the tendency to have overly negative reactions to perceived setbacks and failures, uncertainties about performance, the tendency to engage in harsh self-criticism when performance falls short of perfection and a tendency to perceive others as demanding perfection, there is a decrease in self-esteem. There are many factors that affect self-esteem such as family socialisation (Ayyash & Alamuddin, 2007) and negative evaluation from society and others with depression and social anxiety (Nepon et al., 2011).

5. Conclusion

The results of the present study conclude that the degree of perfectionism and self-esteem among gifted students was of an average degree. It helps supervisors to educate gifted students by building training programs to maintain the acceptable degree of perfection for them and raise the level of their self-esteem. The results of the study also showed that there is a negative correlation between

perfectionism and self-esteem among gifted students, which strengthens and encourages supervisors for gifted students to build training and counselling programs to reduce perfectionism and improve their self-esteem.

There are some limitations to generalise the results of study such as the small number in the sample of the study (i.e., 89 male and female students), the methodology used to analyse the results which depend on arithmetic averages and standard deviations and the age group (16–17 years) for the study sample, which represents adolescence and the mechanism for distributing study tools that were made using Google forms due to COVID-19 pandemic. This requires more research to take into account other than these determinants and study other psychological variables that are affected by perfectionism, such as motivation, schizophrenia and psychological satisfaction.

Conflict of interest

The author declares no conflict of interest.

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References

Ablard, K.E. & Parker, W.D. (1997). Parents' achievement goals and perfectionism in their academically talented children. *Journal of Youth and Adolescence, 26*, 651–668. Retrieved from https://eric.ed.gov/?id=EJ562043

Adkins, K. K. & Parker, W. (1996). Perfectionism and suicidal preoccupation. *Journal of Personality, 64*, 529–543. doi.:10.1111/j.1467-6494.1996.tb00520.x

AL-Momani, R. A. & Bataineh, O. M. (2020). The relationship between perfectionism and goal orientation among gifted students in King Abdullah II School of Excellence. *Journal of Educational and Psychological Studies, 14*(1), 23–40. doi:10.24200/jeps.vol14iss1pp23-40

Alshurman, W. M. & Alkhateeb, A. A. (2015). The extent to which teachers of talented and creative student possess knowledge and skills according to CEC-NAGC criteria in Jordan. *European Scientific Journal, ESJ, 11*(28). Retrieved from http://eujournal.org/index.php/esj/article/view/6384

Al-Surur, N. (2003). *Introduction to education for the distinguished and outstanding* (4th ed.). Amman, Jordan: Dar Al-Fikr.

American Psychiatric Association, DSM-5 Task Force (2013). *Diagnostic and statistical manual of mental disorders: DSM-5™* (5th ed.). Washington, DC: American Psychiatric Publishing, Inc. doi:10.1176/appi.books.9780890425596

Ayyash-Abdo, H. & Alamuddin, R. (2007). Predictors of subjective well-being among college youth in Lebanon. *The Journal of Social Psychology, 747*, 265–285. doi:10.3200/SOCP.147.3.265-284

Baumeister, R. F., Campbell, J. D., Krueger, J. I. & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest, 4*(1), 1–44. doi.:10.1111/1529-1006.01431

Berzonsky, M. D. (1992). Identity style and coping strategies. Journal of Personality, 60, 771- 788. doi:10.1111/j.1467-6494.1992.tb00273.x

Besharat, M., Pourhosein, R., Rostami, R. & Bazzazian, S. (2010). Perfectionism and fatigue in multiple sclerosis. *Psychology & Health,* 419–432. doi:10.1080/08870440903464228

Bleeker, M., Evans, S., Fisher, M. & Miller, K. (1998). The effects of extracurricular activities on self-esteem, academic achievement, and aggression in college students. *Psi Chi Journal of Undergraduate Research, 3*(1), 34–38. doi:10.24839/1089-4136.jn3.1.34

Burns, D. D. (1980). The perfectionist's script for self-defeat. *Psychology Today,* 34–51

Damian, L. E., Negru-Subtirica, O., Pop, E. I. & Baban, A. (2016). The costs of being the best: Consequences of academic achievement on students' identity, perfectionism, and vocational development. In A. Montgomery & I. Kehoe (Eds.), *Reimagining the purpose of schools and educational organisations: developing critical thinking, agency, beliefs in schools and educational organisations* (pp. 173–188). Cham, Switzerland: Springer International Publishing. doi:10.1007/978-3-319-24699-4_13

David, Y. D., Moon, S. M. & Feldhusen, J. F. (1998). Achievement motivation and gifted students: a social cognitive perspective. *Educational Psychologist, 33*(2–3), 45–6. doi:10.1080/00461520.1998.9653290

Di Paula, A. & Campbell, J. D. (2002). Self-esteem and persistence in the face of failure. *Journal of Personality and Social Psychology, 83*(3), 711–724. doi:10.1037/0022-3514.83.3.711

DiBartolo, P. M., Frost, R. O., Chang, P., LaSota, M. & Grills, A. E. (2004). Shedding light on the relationship between personal standards and psychopathology: the case for contingent self-worth. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 22*(4), 237–250. doi:10.1023/B:JORE.0000047310.94044.ac

Dunkley, D. M., Zuroff, D. C. & Blankstein, K. R. (2003). Self-critical perfectionism and daily affect: dispositional and situational influences on stress and coping. *Journal of Personality and Social Psychology, 84*(1), 234–252. doi:10.1037/0022-3514.84.1.234

Flett, G. L., Hewitt, P. L., Oliver, J. M. & Macdonald, S. (2002). Perfectionism in children and their parents: a developmental analysis. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: theory, research, and treatment* (pp. 89–132). Washigton, DC: American Psychological Association. doi:10.1037/10458-004

Flett, G. L., Sherry, S. B., Hewitt, P. L. & Nepon, T. (2014). Understanding the narcissistic perfectionists among us: grandiosity, vulnerability, and the quest for the perfect self. In A. Besser (Ed.), *Handbook of psychology of narcissism: diverse perspectives* (pp. 43–66). New York, NY: Nova Science.

Flett, G. L., Besser, A., Davis, R. A. & Hewitt, P. L. (2003). Dimensions of perfectionism, unconditional self-acceptance, and depression. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 21*, 119–138. doi:10.1023/A:1025051431957ober

Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14*(5), 449–468. doi.:10.1007/BF01172967

Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts : Conceptualization, assessment, and association with psychopathology. Journal of Personality and Social Psychology, 60, 456-470 . doi:10.1037//0022-3514.60.3.456

Hewitt, P. L. & Flett, G. L. (2004). *Multidimensional Perfectionism Scale (MPS): technical manual*. Toronto, ON: Multi-Health Systems.

Jaradat, P. (2006) The relationship between self-esteem and irrational trends among university students. *Jordanian Journal of Educational Sciences, 3*(2), 143–153.

Jarwan, F. (2008). *Talent, excellence and creativity* (2nd ed.). Amman, Jordan: Dar Al-Fikr.

John, K. G. & April, K. H. (2017). Explaining sport-based moral behavior among adolescent athletes: the interactive roles of perfectionism and gender. *Journal of Exercise, Movement, and Sport*, *49*(1).

Kahraman, S. & Bulut Pedük, Ş. (2016). Multiple Intelligences and Perfectionism in Middle School Gifted Students. *Journal for the Education of Gifted Young Scientists, 4*(2), 1–13. doi:10.17478/JEGYS.2016219257

Krueger, R. F., Derringer, J., Markon, K. E., Watson, D. & Skodol, A. E. (2013). *The personality inventory for DSM-5 (PID-5)*. Washington, DC: American Psychiatric Association.

Lee, L. (2007). *Dimensions of perfectionism and life stress: predicting symptoms of psychopathology* (Doctoral dissertation). Retrieved from Dissertations and Theses database. (UMI No. NR69940)

Ma, M. & Zi, F. (2011). A qualitative study on personality traits of negative perfectionist. *Social and Behavioral Sciences,* (29), 116–121. doi:10.1016/j.sbspro.2011.11.215

Malhi, R. & Zerns (2006). *Enhancing self-esteem*. Riyadh, Saudi Arabia: Jarir Bookstore.

Melhem, M. A., Khazali, Q. M. & Momani, A. L. A. (2017). Psychological identity and self-esteem styles among the talented students. *Dirasat, Educational Sciences, 44*(4), 131–147.

Mofield, E. L. & Parker Peters, M. (2018). Mindset misconception? Comparing mindsets, perfectionism, and attitudes of achievement in gifted, advanced, and typical students. *Gifted Child Quarterly, 62*, 327–349. doi:10.1177/0016986218758440

Nealis, L. J., Sherry, S. B., Lee-Baggley, D. L., Stewart, S. H. & Macneil, M. A. (2016). Revitalizing narcissistic perfectionism: evidence of reliability and validity of an emerging construct. *Journal of Psychopathology and Behavioral Assessment, 38*, 493–504. doi:10.1007/s10862-016-9537-y

Nealis, L. J., Sherry, S. B., Sherry, D. L., Stewart, S. H. & Macneil, M. A. (2015). Toward a better understanding of narcissistic perfectionism: evidence of factorial validity, incremental validity, and mediating mechanisms. *Journal of Research in Personality, 57*, 11–25. doi:10.1016/j.jrp.2015.02.006

Nepon, T., Flett, G. L., Hewitt, P. L. & Molnar, D. S. (2011). Perfectionism, negative social feedback, and interpersonal rumination in depression and social anxiety. *Canadian Journal of Behavioural Science, 43*(4), 297–308. doi:10.1037/a0025032

Park, Y., Kim, J., Jo, E., Lee, J. & Woo, K. (2017). Influential factors for happiness of adolescents who use community child centers. *Korean Academy of Community Health Nursing, 28*(1), 34–43. doi:10.12799/jkachn.2017.28.1.34

Rice, K. & Lopez, F. (2004). Maladaptive perfectionism, adult attachment, and self-esteem in college students. *Journal of College Counseling, 7*, 118–128. doi:10.1002/j.2161-1882.2004. tb00243.x

Robins, R. & Trzesniewski, K. (2005). Self-esteem development across the lifespan. *Current Directions in psychological Science, 14*(3), 158–162. doi: 10.1111/j.0963-7214.2005.00353.x

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Sidney, M. & John, F. (1998). Achievement motivation and gifted students. *A Social Cognitive Perspective, 33*(283), 45–63. doi: 10.1080/00461520.1998.9653290

Silverman, L. (2003). *Characteristics of giftedness scale : a review of literature* (pp. 1–14). Retrieved from http//:www. Gifted development. Com.

Smith, M. M. (2016). The Big Three Perfectionism Scale (BTPS). *Measurement Instrument Database for the Social Science*. Retrieved from www.midss.ie

Smith, A., Schneider, B. H. & Ruck, M. D. (2005). "Thinking About Makin' It": Black Canadian Students' beliefs regarding education and academic achievement. *Journal of Youth Adolescence, 34*, 347–359. doi:10.1007/s10964-005-5759-0

Smith, M. M., Saklofske, D. H., Stoeber, J. & Sherry, S. B. (2016). The big three perfectionism scale: a new measure of perfectionism. *Journal of Psychoeducational Assessment, 34*, 670–687. doi:10.1177/0734282916651539

Stickle, F. (2007). *Adolescent psychology* (6th Ed.). New York: McGraw Hill Companies.

Stoeber, J. (1998). The frost multidimensional perfectionism scale revisited: more perfect with four (instead of six) dimensions*. Personality and Individual Differences, 24*(4), 481–491. ISSN 0191-8869. doi:10.1016/S0191-8869(97)00207-9

Stoeber, J. (2014). Multidimensional perfectionism and the DSM-5 personality traits. *Personality and Individual Differences, 64,* 115–120. doi:10.1016/j.paid.2014.02.031.

Stoeber, J. (2015). How other-oriented perfectionism differs from self-oriented and socially prescribed perfectionism: Further findings. *Journal of Psychopathology and Behavioral Assessment, 37*(4), 611–623. doi: 10.1007/s10862-015-9485-y

Stoeber, J. & Childs, J. (2010). The assessment of self-oriented and socially prescribed perfectionism: subscales make a difference. *Journal of Personality Assessment, 29*(6), 577–585. doi:10.1080/00223891.2010.513306

Stoeber, J., Sherry, S. B. & Nealis, L. J. (2015). Multidimensional perfectionism and narcissism: Grandiose or vulnerable? *Personality and Individual Differences, 80*, 85–90. doi:10.1016/j.paid.2015.02.027

Sturman, E. D., Flett, G. L., Hewitt, P. L. & Rudolph, S. G. (2009). Dimensions of perfectionism and self-worth contingencies in depression. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 27*(4), 213–231. doi:10.1007/s10942-007-0079-9

Summerfeldt, L. J., Antony, M. M. & Swinson, R. P. (2000). Incompleteness: a link between perfectionistic traits and OCD. In P.J. Beiling (Chair), *Perfectionism and Psychopathology: Linking Personality and Dysfunctional Behaviour*. Symposium conducted at the the 34th annual meeting of the A ABT, New Orleans, USA, November,2000. Retrieved from http://www.trentu.ca/ psychology/ lsummerfeldt/abstracts.html

Wadman, R., Durkin, K. & Conti-Ramsden, G. (2008). Self-esteem, shyness, and sociability in adolescents with specific language impairment (SLI). *Journal of Speech, Language, and Hearing Research, 51*(4), 938–952. doi:10.1044/1092-4388(2008/069

Weiner, I. & Craighead, W. (2010). *Corsini's Encyclopedia of psychology* (4th ed., Vol. 4, pp. 1647–1648). New York, Hoboken, NJ: John Wiley and Sons Inc.

Woolfolk, A. (2001). *Educational psychology* (8th ed.). Needham Heights, MA: Allyn & Bacon.