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**Original Paper** 

# The Character Strengths Predictive of Responsibility in Adolescents

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# **Abstract**

Introduction: strengths are positive traits in feelings, thoughts, and behaviors that contribute to good character. Character strengths play a major role in enhancing responsibility in adolescents.

Method: The purpose of this study was to determine the character strengths predictive of responsibility in adolescents. The research method was correlation and the statistical population included ninth grade adolescent students. Statistical sample consisting of 417 students (213 girls and 204 boys) were selected by cluster sampling. Students responded to the Values in Action Inventory of Strength Scale of Park and Peterson and Nemati's Responsibility questionnaire. Data were analyzed using multiple

Results: The results showed that the strengths of perseverance, honesty, kindness, leadership, prudence, self-regulation, gratitude and humor in girls and boys predict responsibility. In addition, curiosity, perspective, zest, love, and appreciation of beauty and excellence in boys also presuppose responsibility (P≤ 0/001).

Conclusion: According to the findings of this study it can be stated that some strengths predict responsibility in adolescents which can be considered in strengths' programs and interventions.

Keywords: Character Strengths, Responsibility, Adolescent

# Introduction

Adolescence is an important period in the evolution of the acquisition of social participation values, individual and social responsibilities. In late adolescence, boys and girls are expected to act as an independent individual and have an appropriate level of responsibility for participating in the society. Due to the development of skills, the adolescent is responsible for many different personal, educational and social affairs [1]. At the same time, one of the goals of schools for teens is to prepare them for adulthood. Almost all of this preparation focuses on technical skills, professionalism and knowledge, which of course is essential. However, it should not be forgotten that what is very important in adulthood is a sense of respect for oneself and others and a high level of responsibility, willpower and selfdiscipline. Cultivating responsibility in adolescents is effective in creating security, reducing aggression and destructive behaviors and encouraging them to resolve constructive disputes with peers is effective [2].

Responsibility is a form of character that allows a person to be responsible, disciplined, and to do things in the best possible way [3]. Character refers to a set of positive personality traits and behaviors that are morally valuable. Cultivating good character reduces the likelihood of negative outcomes and promotes healthy growth. For example, good character has been identified for predicting the maturity of behaviors such as school success, leadership, physical health, helping others, delaying in gratification, and overcoming difficulties in adolescents [4]. Responsibility is one of the most important concepts in the field of character education and models. For example, the Hellison's

personal and social responsibility model tried to cultivate morality and responsibility in adolescents and provided an appropriate role and good character education for them [5]. Teaching moral values such as respect, empathy, self-control, spirituality, and responsibility, and the benefits of good character can be a shield against the social dangers of adolescence [4].

Responsibility of individuals is also effective in achieving happiness and how to face with life events. Most people are responsible for their own actions and their choices are influenced by their character. Therefore, responsibility is a necessary process in the field of positivist psychology, because it is a part of the reason for behaviors and actions [6]. In positivist psychology the best thing about human nature has been asked. The results of this question was the classification of character strengths [7]. Peterson and Seligman [8] presented The Values in Action (VIA) classification of character strengths. Character strengths include 24 strengths (creativity, curiosity, judgement, love of learning, perspective, bravery, perseverance, honesty, zest, love, kindness, social intelligence, teamwork, fairness, leadership, forgiveness, humility, prudence, regulation, appreciation of beauty and excellence, gratitude, hope, humor, religiousness) and the six virtues of wisdom and knowledge, courage, humanity, justice, temperance and transcendence. Character strengths are positive traits that are partially reflected in a person's feelings, thoughts, and behavior, and are prone to orientation moral excellence [7].

Park and Peterson [9] have emphasized that character strengths are important characteristics for the development and well-being of individuals that can be an effective help for their self-confidence, responsibility and individual identity. There is a relationship between character strengths and positive personality traits such as responsibility. Personality trait lead to the use of strengths in different life situations and is associated with positive consequences such as happiness, life satisfaction and well-being [10]. For example, in honesty the individual is responsible for his feelings and actions and expresses himself/herself honestly. Having individual responsibility for one's actions leads to greater control over life [8].

Durlak et al. [11] showed that strengthening positive traits such as self-awareness, self-management, and academic performance. responsibility promotes Responsibility of individuals for their actions and observance interpersonal of norms accompanied by kindness. The goal of a person who behaves kindly while respecting others is emotionally and cognitively derived from individual responsibility [12]. Kindness is a social behavior that is associated with optimism, happiness, and responsibility students [13]. Strengths are associated with responsibility that can play an effective role in fostering good characters in adolescents.

To form a good character, it is necessary to have responsibility [14]. Responsibility is one of the most important concepts in the field of character education [5]. In the 1900s, Thomas Lickona introduced the

concept of character education, which was based on respect and responsibility [3]. Character training in the educational process develops through learning activities. Most of the character training programs try to teach respect, virtues such as; compassion, responsibility, self-control and honesty. For example, the development of empathy increases students' responsibility and positive feelings. Internalizing responsibility leads to altruistic behaviors and positive traits in individuals [15]. Majid et al. [16] showed that teachers who motivate students and have the strength of humanity, strengthen responsibility in students. Niemiec [17] states that character training leads to important characteristics such as honesty, integrity, kindness, fairness and responsibility. Agent thinking also plays an essential role in the strengths of hope create responsibility to achieve the McCullough et al. [18] suggest that the characteristic of responsibility is associated with positive academic outcomes and gratitude at the age of 7-8 years. Proctor and Linley [4] also showed that the emotions and behaviors of gratitude are effective in promoting well-being and are manifested as an indicator of morality and responsibility throughout life. Judge et al. [19] showed that the development of adolescent responsible behaviors is associated with success and satisfaction in all related fields to adult life, from family to work. Seligman [6] also suggests that responsibility is an essential process in the field of positive psychology. However, among the 24 strengths, which one plays a significant role in predicting responsibility in adolescents and how the difference between the strengths of girls and boys in predicting responsibility, are the issues which have not been addressed and are innovations of this study.

Today more than ever, societies need to emphasize traits such as responsibility and respect in adolescents and in school curricula [2]. Therefore, character strengths with an emphasis on good character can affect adolescents' responsibility. Paying attention to gender differences, character strengths are also important in predicting responsibility, and based on awareness of the strengths of adolescent girls and boys, programs and interventions can be prepared based on their needs [20]. The aim of the present study was to investigate the strengths predicting responsibility in both boys and girls.

#### **Method**

The research method was correlation. The statistical population of this research included the junior high school students in ninth grade, which included 44,702 boys and 43,525 girls in Tehran. The statistical sample (417 students) of the study was from different areas of Tehran in the 2018 academic year (213 girls and 204 boys, 51.1% girls and 48.9% boys, with an average age of 14.64). Then, with the consent of the school principal, the ninth grade students answered the questionnaires. In order to determine the sample size required for the  $R^2$  test in the regression model, Miles and Shevlin [2] suggested that the sample size should be greater than K + 104, K represents the number of independent variables. The

inclusion criterion included being ninth grade and not having specific psychological problems (according to the teacher, parents and students). Parents did not include a case in the student's file. Students were not required to write their name on the questionnaire and were asked to indicate if they had a problem. School teachers were also asked to report students' psychological problems. The exclusion criterion was not answering to the questions of the questionnaire.

The tools used in this study were as follows:

Values in Action Inventory of Strengths scale (VIA-Youth): Inventory of 96 item is the summary form of the 198 scales of Park and Peterson, This scale is suitable for 10 to 18 year olds. This scale contains four items for each strength and on the Likert scale. Five options are scored from very similar to me (5 points) to not at all like me (1 point). The scale has 24 strengths and six virtues. Scoring some questions is inverse. Due to ethical considerations and the request of the American Positive Psychology site not to publish how to score, you can refer to the positive psychology site. McGrath and Walker [22] stated that the mean correlation between the main scale and the revised strengths scale is 0.82 (range = 0.70 to 0.92). The internal consistency of the adolescent strengths scale in the positive psychology site is between 0.69 and 0.95. Park and Peterson reported the adolescent strengths scale after six months using the retest method from 0.46 to 0.71. In the research of Khosrojerdi et al. [23], the scale was translated into Persian and re-translated and after the translation was confirmed by experts and the concept of scale materials, it was prepared for implementation. In the study of psychometric properties, Cronbach's alpha ranged from 0.60 to 0.97 by retest method. The correlation coefficient of strengths and virtues with a time interval of 15 days was from 0.49 to 0.97.Convergent validity is the scale of character strengths with happiness and self-efficacy form 0.14 to 0.57. Virtues, wisdom, humanity, justice, temperance courage, transcendence in confirmatory factor analysis of CMIN/DF, is from 1.74 to 3.85, of CFI from 0.90 to 0.95, of PCFI is from 0.67 to 0.78 and of RMSEA is from 0.04 to 0.82. In the present study, Cronbach' alpha strengths are from 0.52 to 0.82.

**Individual and Social Responsibility Scale:** This scale (50 questions) was developed by Prisima Nemati in 2009. This scale is scored on a five-point Likert scale form strongly disagree (1) to strongly agree (5). Scoring some questions is inverse (6, 8, 10, 12, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 and 46). By summing each of

the questions on the scale, an overall score is obtained. Scores range from 50 to 250. A higher score indicates more responsibility. Reliability by internal consistency method for the whole questionnaire was 0.91. The correlation between the questions and the general concept of the responsibility scale was between 0.48 and 0.78. In the study of structural validity using t-test with two groups of high and low responsibility showed a significant difference. In the present study, the internal consistency was 0.81.

#### **Results**

Mean, standard deviation and correlation matrix of character strengths and responsibility for girls and boys are presented in Tables 1 and 2. The lowest average straights for girls were self-regulation and the highest was kindness. The lowest standard deviation of strengths was kindness and the highest was self-regulation. The lowest average of strengths for boys is self-regulation and the highest is gratitude, and the lowest standard deviation of strengths is perseverance and the highest is self-regulation. Responsibility has a significant correlation with girls' strengths from 0.38 to 0.64 and with boys' strengths from 0.38 to 0.62.

Table 3 shows the results of regression analysis by the Backward method. The regression analysis assumptions showed that Durbin-Watson = 2.01 and tolerance = 0.36 to 0.82 had appropriate values. The analysis was performed in sixteen steps, and in the first fifteen steps, sixteen strengths were excluded from the equivalent, respectively. In step sixteen, perseverance, honesty, kindness, leadership, prudence, self-regulation, gratitude, and humor remained as predictor variables in the equivalent. About 0.65 of the variance of changes in the responsibility criterion is explained by predictor variables, F = 15.23 is significant at the level (P<0.01).

In Table 4, the regression analysis assumptions showed that Durbin-Watson = 2.01 and tolerance = 0.35 to had appropriate values. The analysis was performed in 11 steps. In the first ten steps, eleven strengths were out of the equivalent. In the eleventh the strengths of curiosity, perspective. perseverance, honesty, zest, love, kindness, leadership, prudence, self-regulation, appreciation of beauty and excellence, gratitude and humor remained as predictor variables in the equation. The coefficient determination of the remaining variables with the responsibility criterion variable was significant 0.72 with f = 20.66 at the level (P<0.01).

Table 1. Mean, standard deviation and	d Correlation matrix of chara	cter strengths and re	sponsibility in airls

Variables	M (S)	1	2	3	4	5	6	7	8	9
1.Perseverance	14.30 (3.34)	1								
2.Honesty	14.04 (3.64)	0.49**	2							
3.Kindness	16.40 (2.81)	0.30**	0.34**	3						
4.Leadership	13.77 (3.87)	0.53**	0.33**	0.28**	4					
5.Prudence	14.59 (3.42)	0.60**	0.48**	0.30**	0.35**	1				
6.Self- regulation	12.76 (3.94)	0.40**	0.46**	0.22**	0.24**	0.50**	1			
7.Gratitude	16.03 (3.49)	0.40**	0.42**	0.33**	0.24**	0.44**	0.33**	1		
8.Humor	15.29 (3.69)	0.19**	0.10**	031**	0.29**	0.15**	0.09	0.21**	1	
9.Responsibility	187.07 (25.76)	0.64**	0.59**	0.38**	0.48**	0.62**	0.51**	0.54**	0.12**	1

**Table 2.** Mean, standard deviation and Correlation matrix of character strengths and responsibility in boys

Variables	M (S)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.Curiosity	14.56 (3.40)	1													
2.Perspective	14.80 (2.90)	0.42**	1												
3 Perseverance	14.34 (2.89)	0.45**	0.61**	1											
4.Honesty	13.77 (3.76)	0.37**	0.46**	0.49**	1										
5.Zest	15.46 (3.38)	0.39**	0.47**	0.37**	0.33**	1									
6.Love	14.18 (3.54)	0.28**	0.49**	0.43**	0.38**	0.50**	1								
7.Kindness	15.61 (2.97)	0.28**	0.37**	0.30**	0.34**	0.29**	0.33**	1							
8.Leadership	13.63 (3.37)	0.36**	0.63**	0.53**	0.33**	0.35**	0.36**	0.28**	1						
9.Prudence	14.99 (3.20)	0.36**	0.54**	0.60**	0.48**	0.32**	0.37**	0.30**	0.35**	1					
10. Self- regulation	12.77 (3.81)	0.24**	0.39**	0.40**	0.46**	0.32**	0.33**	0.23**	0.24**	0.50**	1				
11.Appreciation of Beauty	15.40 (3.54)	0.44**	0.41**	0.41**	0.32**	0.37**	0.43**	0.36**	0.25**	0.38**	0.30**	1			
12. Gratitude	16.50 (3.05)	0.31**	0.35**	0.40**	0.42**	0.45**	0.44**	0.33**	0.24**	0.44**	0.33**	0.44**	1		
13.Humor	15.71 (3.75)	0.18**	0.36**	0.19**	0.10**	0.45**	0.37**	0.31**	0.29**	0.15**	0.09**	0.27**	0.21**	1	
14.Responsibility	190.53 (25.65)	0.39**	0.49**	0.64**	0.59**	0.42**	0.45**	0.38**	0.48**	0.62**	0.51**	0.40**	0.54**	0.44**	1

Table 3. Results of regression analysis to predict responsibility based on character strengths in girls

		,				
Predictive variables	b	SE	В	t	P	Tolerance
Perseverance	1.89	0.54	0.24	3.46	0.001	0.36
Honesty	0.69	0.38	0.09	1.76	0.07	0.60
kindness	1	0.45	0.11	2.21	0.02	0.74
Leadership	1.32	0.37	0.19	3.56	0.001	0.58
Prudence	1.34	0.48	0.17	2.77	0.006	0.44
Self- regulation	0.76	0.33	0.11	2.28	0.02	0.69
Gratitude	1.47	0.38	0.20	3.81	0.001	0.66
Humor	-0.57	0.32	0.083	-1.75	0.08	0.82

**Table 4.** Results of regression analysis to predict responsibility based on character strengths in boys

Predictive variables	b	SE	В	t	Р	Tolerance
Curiosity	-0.61	0.36	-0.08	-1.69	0.09	0.66
Perspective	-1.89	0.58	0.21	-3.26	0.001	0.35
Perseverance	1.80	0.49	0.20	3.62	0.001	0.48
Honesty	1.77	0.35	0.26	4.97	0.001	0.55
Zest	1.08	0.41	0.14	2.60	0.01	0.50
Love	0.82	0.36	0.14	2.24	0.02	0.59
Kindness	0.72	0.39	0.08	1.83	0.06	0.71
Leadership	1.44	0.4	0.19	3.61	0.001	0.54
Prudence	1.70	0.41	0.21	4.09	0.001	0.56
Self-regulation	0.75	0.43	0.11	2.17	0.03	0.56
Appreciation of Beauty	0.61	0.36	0.08	1.69	0.09	0.60
Gratitude	1.36	0.41	0.16	3.26	0.001	0.62
Humor	-1.14	0.33	-0.16	3.38	0.001	0.63

# Discussion

The aim of this study was to determine the character strengths of the predictive responsibility in adolescents. The results of Tables 1 and 2 have revealed that in girls, perseverance, honesty, kindness, leadership, prudence, self-regulation, gratitude, and humor have a significant correlation with responsibility. In boys, curiosity, perspective, perseverance, honesty, zest, love, kindness,

leadership, prudence, self-regulation, appreciation of beauty and excellence, gratitude and humor have a significant correlation with responsibility. According to a previous study [14], good character is essential for responsibility. Character is one of the main foundations for understanding a good psychological life [2]. Seligman [6] also considers responsibility necessary in the field of positive psychology. In explaining the results, it can be

stated that a combination of character strengths is effective in adolescents' responsibility. As Park and Peterson [9, 25] and Niemiec [17] have shown, there is a combination of strengths in character strengths. For example, responsibility is a combination of perseverance, honesty and teamwork. In this study, teamwork with responsibility has not been significant.

The results of Tables 3 and 4 have shown that the strengths of perseverance, honesty, kindness, leadership, prudence, self-regulation, gratitude and humor predict responsibility in adolescent girls and boys. In addition, in boys, curiosity, perspective, zest, love and appreciation of beauty and excellence also predict responsibility. Peterson and Seligman [8] showed that a level of zest is associated with life satisfaction that is followed by the strengths of love, hope and gratitude.

Sapriya and Budimansyah [26] state that curiosity, love, honesty, perseverance and appreciation of beauty and excellence are associated with responsibility.

Responsibility is one of the components that has been considered in adolescence due to their growing skills in various personal, educational and social affairs [1]. Actually, character strengths can play a facilitating role for adolescents. For example, leadership strengths can be enhanced by taking responsibility for various tasks at school and at home [21]. In this study, leadership was a predictor of responsibility in girls and boys, and zest seems essential for boys' responsibility. As Park and Peterson [9] suggested, character strengths can play an important role in adolescents' development, well-being, and responsibility. Using strengths in different life situations along with responsibility leads to positive outcomes such as well-being for adolescents [10]. In this regard, honesty with responsibility in adolescents gives them more control over life [8] and they are better able to cope with their life events. This study also showed that honesty is a predictor of girls' and boys' responsibility. Niemiec and McGrath [27] have also stated that a person who has honesty is responsible for his/her own behavior

Strengthening strengths and responsibilities during adolescence that is associated with worries can be effective in reducing their individual, educational and social concerns [4], and plays an important role in understanding personal and social relationships and respecting others [12]. Understanding and respect are accompanied by kindness, responsibility, optimism and happiness in adolescents [13]. Niemiec and McGrawth [28] state that when you have the strength of kindness and you want to be kind to yourself and others, it is associated with taking responsibility for the welfare of you and the others. The responsibility of character strengths is the result of perseverance, teamwork etc. [28], which can also affect the academic success of adolescents.

responsibility is recognized as an indicator of psychosocial maturity [29]. On the other hand, character strengths stem from the insight that can help reinforce adaptive behaviors and lead to human flourishing that stems from positive emotion experiences, personal and professional achievements, constructive relationships, and the

meaning of life [30]. This is something that can have a big role for teens in their current and future lives. Procter & Linley [4] state that human strength of prudence is the basis of human evolution, because it creates a sense of opportunity, responsibility, and choice. Prudence is associated with a sense of individual power and control. The results of Tables 3 and 4 show the differences in strengths in predicting responsibility of girls and boys, which reflects the sexual differences strengths in responsibility. Peterson and Seligman [8] suggest that men are more likely to seek novelty than women. The manifestation of differences in adolescent character strengths in girls and boys is based on the role they play in entering the adult world. In addition, the emergence of differences in character strengths during adolescence is the result of their different social dynamics [31].

Paying attention to gender differences in character strengths is important because of its psychological benefits, and each of these strengths needs reinforcement and special intervention programs [32]. In many strength studies, no sex differences were reported for 18 of the 24 strengths [20]. Paying attention to gender differences strengths in terms of responsibility in adolescence can be more effective on adolescents. By strengthening and cultivating the special strengths of adolescent girls and boys, responsibility is strengthened and promoted in them. In fact, cultivating gratitude predicts responsibility that creates attention and appreciation in adolescents and prevents negative bias [33]. It actually strengthens the ability to plan, spirituality and loyalty, resilience and coping with difficult situations [34]. Humor is another important educational tool that helps adolescents keep in touch with learners actively and lively and affects social intelligence, critical thinking and goal achievement [34, 35] and also predicts responsibility. Therefore, it is suggested that character strengths be considered in relation to the influential components during adolescence to help them have a healthy life and well-being life by emphasizing their strengths and positive emotions during adolescence. Also, paying attention to academic success and optimism during adolescence is very important which could be considered in future research. Character strengths and responsibility play an important role in the relationship between educators, parents and peers, and it is necessary to be considered.

# **Conclusion**

Adolescence is a period in which they are expected to have an appropriate level of responsibility to succeed in a variety of personal, educational, and social endeavors. Character strengths contribute to a good psychological life and reflect positive thoughts, feelings, and behaviors that enable adolescents to be more successful as their abilities develop in different areas of life. Character strengths enables adolescents to be more successful by developing strengths in various areas of life. Paying attention to gender differences in adolescents' strengths helps them to develop and strengthen responsibility based on their needs and gender roles.

One of the limitations of the present study was the lack of

screening of adolescents through questionnaires related to psychological problems. Paying attention to various factors affecting responsibility such as the study of developmental age and the role of parents due to modeling on adolescents is another limitation of the study. Therefore, an appropriate questionnaires is suggested to be used to diagnose psychological problems in adolescents. Predicting parent-adolescent character strengths on adolescents' responsibility due to parent-adolescent interaction should be considered. A study on the developmental age from childhood to adolescence with respect to gender should also be considered. Due to the attention to the strengths affecting adolescent's responsibility and their gender, it is also packages, that educational training suggested responsibility, be designed and used.

#### **Conflict of Interest**

The authors declared no conflicts of interest.

#### **Ethical Approval**

In this research, ethical principles were considered. The students were informed about the purpose of the research and their names were not mentioned in the questionnaire due to confidentiality. They had the right to withdraw from the study at any time.

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### Resources

- Crone EA, Fuligni AJ. Self and others in adolescence. Annual review of psychology. 2020;71:447-69. doi: 10.1146/annurevpsych-010419-050937.
- Suprani S, Hendracipta N. Development of Character Education in Elementary School Through Macromedia Flash Foklore. JPsd (Jurnal Pendidikan Sekolah Dasar). 2019;5(2):180-92.
- Kamaruddin SA. Character education and students social behavior. Journal of Education and Learning. 2012;6(4):223-30.
- Proctor C, Linley PA. Research, applications, and interventions for children and adolescents: Springer; 2013.
- Adi S, editor The Formation of Student Character through the Active Role of Physical Education Teachers as a Role Model.
   2nd International Conference on Sports Sciences and Health; 2018;7:75-79.
- Seligman ME. Flourish: A visionary new understanding of happiness and well-being: Simon and Schuster; 2012.
- Niemiec RM. Finding the golden mean: the overuse, underuse, and optimal use of character strengths. Counselling Psychology Quarterly. 2019;32(3-4):453-71. doi:10.1080/09515070.2019.1617674.
- Peterson C, Seligman ME. Character strengths and virtues: A handbook and classification: Oxford University Press; 2004.
- Park N, Peterson C. Character strengths: Research and practice. Journal of college and character. 2009;10(4):1-10.doi:10.2202/1940-1639.1042.
- Noronha APP, Campos RRFD. Relationship between character strengths and personality traits. Estudos de Psicologia (Campinas). 2018;35:29-37. doi:10.1590/1982-02752018000100004.
- Durlak JA, Weissberg RP, Dymnicki AB, Taylor RD, Schellinger KB. The impact of enhancing students' social and emotional learning: A meta- analysis of school- based universal interventions. Child development. 2011;82(1):405-32. doi:10.1111/j.1467-8624.2010.01564.x.

- Caldwell C. Understanding kindness—A moral duty of human resource leaders. The Journal of Values-Based Leadership. 2017;10(2):8.doi:10.22543/0733.102.1188.
- Binfet JT, Gadermann AM, Schonert- Reichl KA. Measuring kindness at school: Psychometric properties of a School Kindness Scale for children and adolescents. Psychology in the Schools. 2016;53(2):111-26.doi:10.1002./pits.21889.
- 14. Dadang M, Sukarliana S. Growing the Character of Responsibility in Students Through Teacher's Exemplary in AntiCorruption Education Efforts. advances in social, education and humanities research. 2021;418. doi:10.2991/assehr.k.200320.013.
- Furlong MJ, Gilman R, Huebner ES. Handbook of positive psychology in schools. 2009.
- Majid RA, Ali MM, Alias A. Teacher Character Strengths and Talent Development. International Education Studies. 2014;7(13):175-83.doi:10.5539/ies.v7n13p175.
- 17. Niemiec RM. Character strenghts interventions: A field guide for practitioners: Hogrefe Publishing; 2017.
- 18. McCullough ME, Kilpatrick SD, Emmons RA, Larson DB. Is gratitude a moral affect? Psychological bulletin. 2001;127(2):249.doi:10.1037/0033-2909.127.2.249.
- Judge TA, Heller D, Mount MK. Five-factor model of personality and job satisfaction: a meta-analysis. Journal of applied psychology. 2002;87(3):530.doi:10.1037/0021-9010.87.3.530.
- Heintz S, Kramm C, Ruch W. A meta-analysis of gender differences in character strengths and age, nation, and measure as moderators. The Journal of Positive Psychology. 2019;14(1):103-12.doi:10.1080.17439760.2017.1414297.
- Miles J, Shevlin M. Applying regression and correlation: A guide for students and researchers: Sage; 2001.
- McGrath RE, Walker DI. Factor structure of character strengths in youth: Consistency across ages and measures. Journal of Moral Education. 2016;45(4):400-18.doi:10.1080/03057240.2016.1213709.
- Khosrojerdi Z, Heidari M, Ghanbari S, Pakdaman S. The Psychometric Characteristics of Values in Action Inventory of Strengths for Youth. Journal of Applied Psychology. 2020;14(3):243-23.doi:10.52547.APSY.2021.216210.0.
- Michael B. Strengths of Character and Virtues: What We Know and What We Still Want to Learn. Praeger Publishers; 2017.In M.A.Warren & S.I. Donaldson.
- Park N, Peterson C. Moral competence and character strengths among adolescents: The development and validation of the Values in Action Inventory of Strengths for Youth. Journal of adolescence. 2006;29(6):891-909.doi:10.1016/j.adolescence.2006.04.011.
- Erlisnawati E, Sapriya S, Budimansyah D, Marhadi H, editors. Analysis of the Character of Responsibility in Pacu Jalur Traditions. Proceedings of the UR International Conference on Educational Sciences; 2019.3,140-143.
- Niemiec RM, McGrath RE. The power of character strengths: Appreciate and ignite your positive personality: VIA Institute on Character Cincinnati, OH; 2019.
- Park N, Peterson C, editors. Assessment of character strengths among youth: The Values in Action Inventory of Strengths for Youth. Indicators of Positive Development Conference; 2003.1-
- Wray-Lake L, Syvertsen AK, Flanagan CA. Developmental change in social responsibility during adolescence: An ecological perspective. Developmental psychology. 2016;52(1):130.doi:10.1037.dev0000067.
- Sommer A. Positive Health in Students: Are Character Strengths Related to an Active Lifestyle? : University of Twente; 2020.26,1-45.
- Brown M, Blanchard T, McGrath RE. Differences in self-reported character strengths across adolescence. Journal of adolescence. 2020;79:1-10.doi:10.1016.j.adolescence.2019.12.008.
- Ovejero M. How are character strengths related to gender. Positive Psychology News Daily. 2012. retrieved from http://positivepsychologynews.com/new/mercheovejero/201208 2423887.
- Shankland R, Rosset E. Review of brief school-based positive psychological interventions: A taster for teachers and educators. Educational Psychology Review. 2017;29(2):363-92. doi:10.1007/s10648-016-9357-3.

- 34. Kerr SL, O'Donovan A, Pepping CA. Can gratitude and kindness interventions enhance well-being in a clinical sample? Journal of Happiness Studies. 2015;16(1):17-36.doi:10.1007/s10902-013-9492-1.
- 35. Chabeli M. Humor: A pedagogical tool to promote learning. Curationis. 2008;31(3):51-9. doi:10.4102/curationis.v31i3.1039.