

RELATIONSHIP BETWEEN LOCUS OF CONTROL, SELF ESTEEM AND HELPING ATTITUDE AMONG YOUNG ADULTS

Sakthi Gopika¹ and Savitha Kamakshi²

¹Student, Department of Psychology, Ethiraj College for Women, India,
sakthigopika352@gmail.com

²Assistant Professor Department of Psychology, Ethiraj College for Women, Chennai, India,
savithakamakshi@ethirajcollege.edu.in

*Corresponding author: sakthigopika352@gmail.com

Abstract

Young adulthood is a unique developmental period that occurs between the ages of 18 to 25 years, during the transition from adolescence to adulthood. This period is characterized by key developmental tasks that allow the young adult to participate in self-exploration to cultivate a personal identity and belief system, all the while gaining independence and autonomy. Research studies on examining the relationship between locus of control, self esteem and helping attitude are limited in Indian context. The present study aims to examine the relationship between locus of control, self-esteem and helping attitude among young adults. A sample of 100 individuals (50 males and 50 females) of the age group 18 - 25 years was collected through digital media as well as in person using non - probability convenience sampling. Pearson's product moment correlation and independent sample t test was the statistical analysis used in the present study. Results indicated that the individual control domain, powerful others and chance control domain of locus of control were not significantly correlated to self-esteem. Self-esteem was positively correlated with helping attitude. Individual control domain of locus of control was positively correlated with helping attitude. Significant gender differences were observed in helping attitude with female young adults scoring higher than their male counterparts. The present study helps in understanding the factors that influence helping attitude thereby enriching the literature. Since individual control and self esteem is found to have significant relationship with helping attitude, interventions focusing on prosocial behavior can consider these variables to have an indirect influence on helping attitude. The results supports sociometer theory highlighting the reciprocal relationship of prosocial behavior and self-esteem.

Key words: Self-esteem, locus of control, helping attitude.

Introduction

According to Santrock (2011), the developmental period of young adulthood begins in the late teens and lasts through the 20s (age approximately 18 to 25 years) (Santrock, 2011; Rider & Sigelman; 2012). Jeffery Arnett (2000) argued that this timeframe is a distinct phase of transition for those aged 18 to 25 years, who are neither adolescents nor adults. Emerging adulthood is characterized by individual variability, semi-autonomy, identity exploration and changing worldviews. The transition from emerging adulthood to adulthood occurs when young people obtain stable housing, complete schooling, establish a career, form a committed romantic relationship, accept responsibility for oneself and gain financial independence. Most of the mean-level personality growth happens in the second and third decade of life (Bleidorn et al., 2018). Whereas individuals were traditionally expected to have figured out who one is and to have taken on mature roles that fit with one's personality by the end of adolescence, these major developmental tasks now increasingly extend to and are even postponed until young adulthood (Schoon, 2015). Locus of control is a personality construct describing how people attribute control of their circumstances and situations and the failure or success of their actions. It informs about the governing forces acting upon people's lives. It is considered an individual's presumption regarding the forces determining punishments and rewards (Arora, 2021).

Basically, the individual assumes that external (powerful others, luck, chance) and/or internal (own personality, knowledge, attitude, status) determinants are responsible for what has happened, achieved or failed in his or her life. Research study showed that female young adults have shown more external locus of control compared to males and both scores are above average in terms of external locus of control (Goswami & Ghosh, 2022).

One of the determining factors of human behavior is self-esteem and it affects the type of individual's locus of control (Judge et.al., 2002). Abdallah (1989) found that individuals with high self-esteem also had an internal locus of control. Ickes and Layden (1978) reported similar relations between attribution for outcome and self-esteem, individuals with high self esteem are more likely to attribute success to internal causes, whereas people with low self-esteem generally attribute positive outcomes to external causes (Das & Pattanaik, 2013). People with high self-esteem have a favorable view of themselves as competent, likeable, attractive and successful people. In the extreme case(e.g., depression), low self-esteem may reflect an opposite pattern in which people see themselves as incompetent, unlikeable failures (Baumgardner & Crothers, 2014). A high level of self-esteem supplies individuals with the ability to accept happy moments, to handle unpleasant situations, to cope effectively with challenges, to engage in close relationships and to improve their strengths (Abdel-Khalek, 2016). People with low or fragile self-esteem may experience debilitating stress and worry over such events.

There exists a reciprocal relationship between prosociality and self-esteem (Eisenberg et al., 2006) People's perception of being good and helpful to others is strengthens by the engagement in prosocial activities and this in turn enhances their self regard. Self esteem acts as a motivational resource to help others. When individuals feel better about themselves, they are able to satisfy their own needs and take care of others' needs by engaging in prosocial behavior (Eisenberg et al., 2006). Research study on childhood parental companionship, self esteem and prosocial behavior in college students showed that self-esteem plays a mediating role in the parental companionship and prosocial behavior of college students (Zhang et al., 2023). Research study by Jan (2017) on helping attitude of professional and non professional students found that female students have much more positive helping attitudes than males. Moreover, individuals with an internal locus of control consistently engage in adaptive and proactive behaviors (Rothbaum, Weisz & Snyder, 1982).Majority of the studies (Patel & Sharma, 2023; Aniljose & Jude, 2021; Anagha & Lilji, 2018) showed that there was no significant correlation between these two variables and few studies (Saadat, Ghasemzadeh & Karami, 2011; Datta & Sinha, 2023) showed that there was significant correlation between some domains of locus of control (internal, chance control and powerful others) and self esteem. Also, most of the studies (Kausar, Alis & Ismail, 2023; Arora & Rastogi, 2018; Ogunboyede & Agokei, 2015) revealed a positive correlation between self esteem and helping attitude. The few studies on the relationship locus of control and helping attitude yielded mixed results (Kant & Kumar, 2024; Afolabi & Alade, 2015).

Therefore the purpose of the study is to examine the relationship between locus of control, self esteem and helping attitude among young adults. Research study on the concept of "helping attitude" and its relationship with related variables, such as locus of control and self-esteem, is limited within the Indian context. Therefore, this study offers a valuable contribution to the existing literature and to the broader research field. Additionally, if a significant relationship is identified between these variables, the findings could aid in developing intervention strategies to enhance helping attitudes among young adults. While existing research studies have focused on locus of control, self-esteem, and helping attitudes, limited studies (Arora, 2021; Suraj et al., 2013; Aniljose & Jude, 2021) have explored the gender differences. So, the present study paves way to understand how gender may moderate or mediate these associations and provide deeper insights into the dynamics of helping behaviors in diverse contexts.

Methodology

Aim:

The aim of the present study is to examine the relationship between locus of control, self esteem and helping attitude among young adults.

Research Question:

1. Is there a relationship between locus of control, self esteem and helping attitude among young adults?
2. Are there gender differences in the locus of control, self esteem and helping attitude among young adults?

Research Design:

A cross-sectional correlational research design was used in the study.

Sample:

This research study was conducted with young adults from the general population in the age group of 18 -25 years. A sample of 100 individuals with 50 males and 50 females were used in this study. A non-probability convenience sampling was used in this study to collect data.

Inclusion criteria:

Participants of age group 18-25 years.

Participants should have a minimum VIII grade English reading level.

Tools Used:

Levenson's Scale of Locus of Control (Levenson, 1973)

Levenson's Scale of Locus of Control is a Likert type scale with multiple choice responses presented in a continuum. Responses range from Strongly Agree, Agree, Undecided, Disagree to Strongly Disagree. The scale consists of 24 statements, 8 each for P – powerful others, C – chance control, I – individual control. The present scale shows high reliability coefficient. Apart from the high reliability and predictive validity, the present scale was also validated against the Rotter's Locus of control scale i.e., the concurrent validity was also established. Scores of both the scales were then correlated with each other, and the correlation coefficient was found out to be 0.54 (with N=220). The split-half reliability of the scale with N= 380, was found to be 0.72 for P, 0.79 for C and 0.65 for I, using spearman -Brown. Further, with an odd-even method, reliability coefficient was found to be 0.69 for P, 0.72 for C and 0.66 for I. The test-retest reliability was also calculated. The test-retest reliability coefficient was found to be 0.76.

The Rosenberg Self-esteem Scale (Rosenberg, 1965)

The Rosenberg Self-esteem scale was developed by Morris Rosenberg in 1965. This scale is a 10-item scale which measures the overall self-worth by measuring both positive and negative outlook about the self. It is a unidimensional scale. All items are answered using a 4-point Likert scale format ranging from strongly agree to strongly disagree. The sum of the scores gives the self-esteem score. The scale ranges from 0-30. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem and above 25 suggest high self-esteem. The test-retest reliability for the RSE range from 0.82 to 0.85. The criterion validity of this scale is 0.55. The scale demonstrates a Guttman scale coefficient of reproducibility of 0.92, indicating excellent internal consistency.

The Helping Attitude Scale (Nickell, 1998)

The Helping Attitude Scale was developed by G. Nickell in 1998. This scale has 20 items which calculate respondents, way of life, behaviour and approach connected with helping. Each item in the scale is answered on a 5-point Likert scale, which ranges from 1 which is strongly disagree to 5 which

is strongly agree. The scale also uses reverse scoring for 6 items. The scores for the reverse scored items are reversed and all 20 scores are added to obtain the total helping score. The total score on scale can range from 20 to 100 with a score of 60 being the neutral score. Test-retest reliability of the questionnaire is found to be 0.837 and the validity for the scale is 0.869.

Procedure for Data Collection:

Data was collected using digital media based on the inclusion criteria. The demographic details and questionnaires which measure all the variables included in the study were presented as a Google form, which was posted on social media platform (WhatsApp). The Google form link was also sent as private messages so that participants can share with others.

Ethical Concerns:

Informed consent was sought prior to the individual's participation in the study. Participants were assured that their participation is voluntary and they can withdraw at any point during the study. Data collected from participants was kept confidential and only researcher and supervisor had access to the data.

Statistical Analysis:

Descriptive statistics was used to analyse the mean and standard deviation of Locus of Control, Self esteem and Helping attitude.

Correlation analysis using Pearson's product moment correlation was used to determine the relationship between Locus of Control, Self esteem and Helping attitude.

Independent t – test was used to determine gender differences in Locus of Control, Self esteem and Helping attitude

Results And Discussions

Table 1

Table 1 shows the mean and standard deviation of locus of control, self esteem and helping attitude.

Variable	N	Mean	Standard deviation	Possible rang
Individual control	100	29.62	4.438	8-40
Chance control	100	24.03	4.543	8-40
Powerful others	100	23.84	5.391	8-40
Self esteem	100	17.54	4.307	0-30
Helping attitude	100	75.58	9.414	20-100

Table 1 illustrates the mean, standard deviation and range (minimum and maximum) of 100 participants in locus of control (individual control, chance control and powerful others) self esteem and helping attitude. Normality test was performed. Data was distributed normally and outliers were removed.

Table 2

Table 2 shows Pearson's Coefficient of Correlation between Locus of control (Individual control, chance control and powerful others), self esteem and helping attitude.

Variables	1	2	3	4	5
Individual Control	-	.16 [-.11, .39]	.20* [-.00, .39]	.09 [-.16, .35]	.61** [.46, .73]
Chance control		-	.54** [.37, .72]	-.15 [-.34, .05]	-.14 [-.33, .07]
Powerful control			-	-.14 [-.33, .07]	-.12 [-.33, .10]
Self esteem				-	.26** [.03, .46]
Helping attitude					-

* $p < .05$ ** $p < .01$. . Values in square brackets indicate the 95% confidence interval for each correlation.

From table 2, it can be observed that the Pearson correlation coefficient between individual control, chance control and powerful control domains of locus of control and self-esteem is ($r = .09, p > .05$), ($r = -.15, p > .05$), ($r = -.14, p > .05$), which implies that there is no significant correlation between these variables at .05 level. The lack of correlation could be because of the influence of other factors such as social support, coping styles, resilience, self-concept etc which may influence the development of one's self esteem.

The Pearson correlation coefficient between self-esteem and helping attitude is $r = .26, p < .05$, which implies that there is a statistically significant positive correlation between self-esteem and helping attitude. It suggests that young adults with higher self-esteem are more likely to exhibit a higher helping attitude. According to sociometer theory, self-esteem is primarily a measure of the health of social relationships and suggests that high self-esteem comes from the thought that people want to spend time with others and maintain long term relationships with them. So, to attain this goal, helping others facilitates people to sustain a relationship. When people help others, it reduces unpleasant feelings and it tends to reduce one's own negative emotions, which in turn, increases one's own self-worth and makes one more likely to have higher self-esteem. This result of the present study is consistent with a study conducted on the young adult population (Arora & Rastogi, 2018).

The Pearson correlation coefficient between individual control domain of locus of control and helping attitude is $r = .61, p < .01$, which implies that there is a statistically significant positive correlation between these variables. The results suggest that young adults who have internal locus of control are more likely to exhibit a higher helping attitude, i.e., young adults who believe that the outcomes in their lives are determined by their own actions are more prone to help others. According to self-perception theory, people infer their own attitudes partly by observing their own behavior and the possible causes of that behavior (Bem, 1972). People with individual locus of control who believe they can influence their outcomes and feel responsible for the occurrences surrounding them will engage in more prosocial acts and exhibit helping behavior because it allows them to express positive traits and enhances their self-esteem. The result of the present study is consistent with the study conducted by Midlarsky and Midlarsky (1973) has shown that an internal locus of control facilitates helping behavior.

The Pearson correlation coefficient between chance control domain of locus of control and helping attitude is $r = -.14, p > .05$, which implies that there is no statistically significant correlation between

these variables. It can also be observed that the Pearson correlation coefficient between powerful others domain of locus of control and helping attitude is ($r = -.12, p > .05$), which implies that there was no significant relationship between these variables. It suggests that individuals' belief that the outcomes of their actions are controlled by chance or fate or by other powerful external factors have no relationship with their tendency or willingness to help others. This result of the present study is consistent with a study indicating that the locus of control had no significant influence on prosocial behavior (Afolabi & Alade, 2015). This lack of correlation could be because of other mediating factors such as social pressures, personality traits, situational influences (bystander effect) and other moral beliefs or values.

Table 3

Table 3 shows independent sample t tests and effect size displaying gender differences in the Locus of Control, Self-esteem and Helping attitude.

Variable	Male M	SD	Female M	SD	t (98)	p	Cohen's d
Individual control	28.92	4.672	30.32	4.118	- 1.59	.115	-.32
Chance control	24.16	5.028	23.9	4.047	.285	.776	.06
Powerful others	23.72	5.842	23.96	4.957	-.222	.825	-.04
Self esteem	17.18	4.498	17.90	4.122	-.834	.406	-.17
Helping attitude	73.32	9.294	77.84	9.070	-2.461	.016*	-.49

* $p < .05$

From table 3, it can be observed that there are no significant gender differences ($p > .05$) in all the domains of locus of control (individual control, chance control and powerful others). This finding suggests that male and female young adults do not differ from each other in these variables. Few studies (Arora, 2021; Datta & Sinha, 2023) reported that there were no significant gender differences in locus of control, which is consistent with the results of the present study. The lack of gender differences in all the domains of locus of control may be due to shifting societal norms and equal access to educational opportunities and advancement for both genders, which led to a parallel perception in the ability to control their lives and environment among both the genders.

The t value obtained in an independent sample t test is .834. The p value obtained is $> .05$, which implies that it is not statistically significant at .05 level. So, it is concluded that there are no significant gender differences in self-esteem among young adults. This finding suggests that male and female young adults do not differ from each other in self-esteem which may be due to the changing social and cultural norms and the availability of equal educational opportunities for both the gender which led them to achieve comparable scores in self-esteem measure. This result of the present study on the gender differences in self-esteem is consistent with a few studies (Patel & Sharma, 2023; Arora, 2021; Aniljose & Jude, 2021; Datta & Sinha, 2023), which also found that there were no significant gender differences in self-esteem.

The t value obtained in an independent sample t test for helping attitude is -2.461. The p value obtained is $< .05$, which implies that it is statistically significant at .05 level. So, it is concluded that there are significant gender differences in helping attitude among young adults. From the mean scores, it can

be concluded that female participants have a higher helping attitude when compared to their male counterparts. This result of the present study is consistent with the outcome of a study conducted by Jan (2017), which showed that female students have much more positive helping attitude than male counterparts, in which female students reported that helping friends, family, and aiding persons in medical emergencies makes them feel at peace with themselves.

Conclusions

The following conclusions were drawn from the present study,

1. There was no significant relationship between the individual control, chance control and powerful others domain of locus of control and self-esteem.
2. There was a significant positive relationship between self-esteem and helping attitude.
3. There was a significant positive relationship between the individual control and helping attitude.
4. There was no significant relationship between the powerful others, chance control and helping attitude.
5. There were no significant gender differences in the individual control, chance control, powerful others and self-esteem.
6. There were significant gender differences in helping attitude, where female young adults showed higher scores on helping attitude than the male counterparts.

Implications:

Students with high self esteem exhibited better resilience and mental wellbeing (Farooq & Majeed, 2024) and low self esteem predicts anxiety symptoms among adolescents (Li et al., 2023) Overall, high self-esteem has a significant impact on an individual's functioning in addition to predicting helping attitude. Therefore, interventions targeting one variable might indirectly have an influence on another. The results also support sociometer theory highlighting the reciprocal relationship of prosocial behavior and self-esteem. There has not been much research conducted on examining the relationship between these variables in the Indian context. The present study will address the research gap on these variables and shed light on important areas of social and personality psychology. The study will help counselors, health care professionals working with emerging adults understand the influence of psychological variables at this critical developmental period. The study highlights the unique influence of individual control on helping attitude unlike the other domains of locus of control proposing that belief that one's own actions determine outcome is positively related to helping attitude.

Limitations:

- The present study relied on self-report measures, which may be subject to bias due to social desirability and may not completely capture individual's actual behaviors, thoughts and opinions which individuals may not be aware of themselves.
- Small sample size and convenience sampling was used hence results must be generalized with caution.

Suggestions for further study:

- Further research studies can focus on other mediating variables such as self-concept, self-efficacy, social intelligence, emotional intelligence and other personality variables can be studied in relation to helping attitude.
- The research can be conducted with a large size sample, since increasing the sample size may be helpful in increasing the reliability of the research.

References

1. Abdallah, T. M. (1989). Self-esteem and locus of control of college men in Saudi Arabia. *Psychological Reports*, 65(3), 1323–1326. https://www.researchgate.net/publication/274045867_Self-Esteem_and_Locus_of_Control_of_College_Men_in_Saudi_Arabia
2. Abdel-Khalek, A (2016). Introduction To the Psychology of Self – Esteem, *Nova Science Publishers*, 1, 1-23. https://www.researchgate.net/publication/311440256_Introduction_to_the_Psychology_of_self-esteem
3. Afolabi, O & Alude, M (2015). Self-Efficacy and Locus of Control as Predictors of Prosocial Behavior and Organizational Commitment among a Sample of Nigerian Nurses, *The International Academic Forum*. <https://papers.iafor.org/submission13432/>
4. Anagha M M & Lijli P G (2018). Relationship between Self- esteem and Locus of Control among Adolescents, *Paripex – Indian Journal Of Research*, 7 (70) 48 - 49. <https://www.worldwidejournals.com/paripex/article/relationship-between-self-esteem-and-locus-of-control-among-adolescents/OTg4MA==/?is=1&b1=197&k=50>
5. Aniljose, P S & Jude, R (2021). Relationship Between Self – Esteem and Locus of Control Among Adolescents, *International Journal of Innovative Research in Technology*, 7 (12), 288-295. <https://ijirt.org/Article?manuscript=151258>
6. Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469–480. <https://doi.org/10.1037/0003-066X.55.5.469>
7. Arora S. (2021). A Study on Locus of Control, Self Esteem & Decision Making among Male & Female Adolescents. *International Journal of Indian Psychology*, 9(3), 1116-1123.
8. Arora, M & Rastogi, K (2018). Correlation between prosocial behavior and self – esteem among young adults, *International Journal of Creative Research Thoughts*, 6 (1) 1436-1441. <http://doi.one/10.1729/IJCRT.17386>
9. Baumgardner, S & Crothers, M (2014). Positive Traits, *Positive Psychology* (1st ed., pp 196-203). Pearson New International Limited.
10. Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 6, pp. 1-62). New York: Academic Press.
11. Bleidorn, W., Hopwood, C. J., & Lucas, R. E. (2018). Life events and personality trait change. *Journal of Personality*, 86(1), 83–96. <https://doi.org/10.1111/jopy.12286>
12. Das, P & Pattanaik, P (2013). Self-Esteem, Locus of Control and Academic Achievement among Adolescents, *International Journal of Scientific Research in Recent Sciences* 1(1). www.isroset.org
13. Datta, A & Sinha, S (2023). A comparative study of the relationship between self-esteem and locus of control between adolescents and young adults, *International Research Journal of Management Sociology & Humanity*, 14 (11) 223-237. <http://www.irjmsh.com/abstractview/18052>
14. Eisenberg, N., Fabes, R. A., & Spinrad, T. L. (2006). Prosocial Development. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (6th ed., pp. 646–718). John Wiley & Sons, Inc..
15. Farooq, S., & Majeed, J. (2024). Self-esteem, resilience, and mental well-being among students. *Educational Administration: Theory and Practice*, 30(5), 9731–9748. <https://doi.org/10.53555/kuey.v30i5.4647>
16. Goswami, S & Ghosh, S (2022). To determine the locus of control in young adults, *Journal of Emerging Technologies and Innovative Research* 9 (2). www.jetir.org

17. Ickes, W., & Layden, M. A. (1978). Attributional styles. In J. H. Harvey, W. Ickes, & R. F. Kidd (Eds.), *New directions in attribution research* (Vol. 2, pp. 119–152). Erlbaum.
18. Jan, H (2017). Helping attitude of professional and non-professional college students, *International Journal of Advanced Educational Research* , 2 (3), 82 – 87. https://www.researchgate.net/publication/318112782_Helping_attitude_of_professional_and_non_professional_college_students
19. Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2002). Are measures of self-esteem, neuroticism, locus of control, and generalized self-efficacy indicators of a common core construct?. *Journal of personality and social psychology*, 83(3), 693.
20. Kant, M & Kumar, D (2024). Predicting the effect of locus of control, emotional intelligence, and prosocial behavior of businessmen and professionals on their subjective well-being, *Library Progress International*, 44(3), 1261-1269. <https://bpasjournals.com/library-science/index.php/journal/article/download/542/334/821>
21. Kusar, A., Alis, N., & Ismail, S (2023). Emotional expressivity as a moderator between self-esteem and prosocial behavior among undergraduate university students in Pakistan, *Nurture*, 17 (4), 641-652. DOI: 10.55951/nurture.v17i4.449|
22. Levenson, H. (1973). *Reliability and validity of the I, P, and C scales – A multidimensional view of Locus of Control*. Paper presented at the Annual Convention of the American Psychological Association, Montreal.
23. Li, W., Guo, Y., Lai, W., Wang, W., Li, X., Zhu, L., Shi, J., Guo, L., & Lu, C. (2023). Reciprocal relationships between self-esteem, coping styles and anxiety symptoms among adolescents: Between-person and within-person effects. *Child and Adolescent Psychiatry and Mental Health*, 17(1), 21. <https://doi.org/10.1186/s13034-023-00564-4>
24. Midlarsky, E. & Midlarsky, M. (1973). Some determinants of aiding under experimentally stress. *Journal of Personality*, 41, 305-327. <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-6494.1973.tb00096.x>
25. Nickell, G. S. (1998). *The Helping Attitude Scale*. Paper presented at the 106th Annual Convention of the American Psychological Association, San Francisco, CA.
26. Ogunboyede, M O & Agokei, R C (2015). Prosocial Behavior of In-School Adolescents: The Perceived Influence of Self-Esteem, Peer Influence and Parental Involvement, *British Journal of Education, Society & Behavioral Science*, 13 (2), 1-9.
27. Patel, N & Sharma, M (2023). Self Esteem and Locus of Control Among Middle Adolescence, *The International Journal of Indian Psychology*, 11 (4). DOI:10.25215/1104.177
28. Rider, E. A., & Sigelman, C. K. (2012). *Life-span human development*. Belmont: Wadsworth.
29. Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.
30. Rothbaum, F., Weisz, J. R., & Snyder, S. S. (1982). Changing the world and changing the self: A two-process model of perceived control. *Journal of Personality and Social Psychology*, 42(1), 5–37. <https://doi.org/10.1037/0022-3514.42.1.5>
31. Saadat, M., Ghasemzadeh, A., Karami, S., & Soleimani, M (2011). Relationship between self-esteem and locus of control in Iranian University students, *Procedia – Social and Behavioral Sciences* 31, 530-535.
32. Santrock, J. W. (2011). *Life-span development* (13th ed.). McGraw-Hill Education.
33. Schoon, I. (2015). Gender and the transition to adulthood: A diverse pathways view. <https://doi.org/10.1002/9781118900772.etrds0138>
34. Suraj, S., Lohi, R., Singh, B., & Patil, P (2023). Self- esteem and Locus of Control as Predictors of Academic Achievement: A study Among Graduate Students, *Annals of Neurosciences*, 31(4), 258 – 264. https://www.researchgate.net/publication/373372043_Self-

esteem and Locus of Control as Predictors of Academic Achievement A Study Among Graduate Students

35. Zhang, Z., Fu, L., Jing, W & Liao, Z (2023). Childhood parental companionship, self-esteem and prosocial behavior in college students: A correlation analysis, *Archives of Psychiatric Nursing* 43, 87- 91. <https://doi.org/10.1016/j.apnu.2023.01.002>