

Predicting Social Adjustment Based on Academic Performance and Academic Self-Concept in Children of Single Parents

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ABSTRACT

Objective: The current study aimed to predict social adjustment based on academic performance and academic self-concept in children of single parents.

Methods and Materials: This research was applied and descriptive-correlational in nature. The study population consisted of all students (ages 12 to 15) in Sanandaj during the academic year (2020-2022), among whom 200 students were selected using a purposive sampling method. For data collection, the Pekl and Weisman Social Adjustment Questionnaire (1999), the Salehi Academic Performance Questionnaire (2015), and the Yes Yesen Chen Academic Self-Concept Questionnaire (2004) were used. For inferential statistics analysis, simultaneous multiple regression was performed using SPSS version 23.

Findings: The findings indicated that the t-test for significance in regression for both academic performance and academic self-concept was significant at the level of less than 0.01. Additionally, academic performance and academic self-concept could explain 37.1% of the variance in social adjustment. Therefore, based on the components of academic performance and academic self-concept in children of single parents, their social adjustment can be predicted.

Conclusion: Given the findings of this research on the relationship between social adjustment and both academic performance and academic self-concept, it is essential for educational interventions and counseling to consider the level of social adjustment among psychologists and educational counselors.

Keywords: Single parenthood, Social adjustment, Academic performance, Academic self-concept

1. Introduction

The family is the first social context for a child, and parents significantly contribute to acquiring social capabilities such as self-regulation and interpersonal skills in their children; undoubtedly, families characterized by

conflict, weak upbringing, cold family interactions, and unresponsiveness to children's needs play a prominent role in the emergence of psychological harm. If the presence of one parent is terminated due to divorce, death, etc., it leaves profoundly detrimental effects on the minds and psyche of children (Khedri & Asgari, 2011). Such conditions trap the

child in an undesired life where they soon experience despair, stress, and many other social harms, adversely affecting their academic performance, social adjustment, self-esteem, and future occupational and social statuses (Esteki Azad et al., 2021).

Psychologists have focused on individual adjustment against the environment, considering it a significant indicator of mental health and a part of normal personality traits that help an individual adjust to the surrounding world, live in harmony with others, and find a place for themselves (Jamali Paghale et al., 2015). Social adjustment reflects an individual's interaction with others, satisfaction with their roles, and performance in these roles, likely influenced by previous personality, culture, and family expectations (DeRosier & Lloyd, 2010). Unsuccessful adjustment leads to problems and poor academic performance (Sujana et al., 2021), where adjustment and academic performance affect each other (Chinna, 2015). Research by Abdullah and Kong (2014) showed that students capable of better adjustment exhibit superior academic performance compared to those struggling with adjustment. Abtahi & Naderi (2012) in their research showed that well-adjusted individuals, due to having qualities such as self-expectancy in the realm of capabilities and opportunities, identify life goals, develop a realistic attitude towards them, choose desirable academic goals, and strive towards achieving them, resulting in desirable academic performance (Abtahi & Nadri, 2012).

Academic performance refers to the abilities and skills learned and acquired by an individual in various academic fields, measurable and assessable through standard tests (Rodríguez et al., 2017). In other words, academic performance indicates the extent of an individual's learning as assessed through various tests (Abdolmaleki et al., 2023; Abedin et al., 2022; Aghaziarati et al., 2020). Learners with desirable academic performance are accepted and validated by others, enhancing their self-confidence and sense of competence. Conversely, individuals with poor academic performance doubt their abilities and, due to feelings of incompetence and lack of self-esteem, refrain from continuing education (Arefi Shelkh et al., 2022; Barani & Fooladchang, 2022). Academic performance affects a wide range of life aspects such as educational advancement, social status, greater success in society, and increased well-being (Galla et al., 2014). Another issue raised in the field of social adjustment is academic self-concept (Khojasteh Mehr et al., 2012). Academic self-concept refers to a student's perception or idea of their competency in relation to school learning, impacting academic progress and being influenced

by it (Miao et al., 2018). Hormuth (2010) defined self-concept as self-evaluation, awareness, and insight someone has about themselves (Hormuth, 1990). Rogers also spoke about the importance of self in human behavioral adjustment, considering "self" as the core of personality and the most fundamental factor in human adjustment to the environment. He believed that the level of adjustment and mental health primarily depends on the congruence or adjustment between self-concept and experiences (Haktanir et al., 2018).

Social-cognitive theory believes that instead of one self, humans possess multiple selves that may change over time. Based on these selves, a hierarchical and multifaceted model of self-concept has been presented, dividing "general self-concept" into two components: "academic self-concept" and "non-academic self-concept" (Nasiri et al., 2017). Academic self-concept as is an individual's personal cognition and perception of their academic ability. Considering that social comparison processes play a crucial role in forming academic self-concept (Boulter, 2002; Parsakia, 2023), academic self-concept heavily relies on social adjustment and is, in fact, a reflection of others' evaluations and has a normative nature. Essentially, an individual's academic self-concept results from comparing oneself with others and at the societal level (Basharpoor & Heidari, 2022).

The results of studies by Boulter (2002), Wouters et al. (2011), and Nasiri et al. (2017) indicate the significant role of academic self-concept in social adjustment. The results showed that an individual's perception of intellectual ability and the ability to make new friends could generally predict academic and social adjustment (Boulter, 2002; Nasiri et al., 2017; Wouters et al., 2011). Therefore, it can be concluded that the more positive the self-concept, the higher the level of adjustment and success (Yengimolki et al., 2015).

Hence, considering what has been stated in this research, the primary research question is whether predicting social adjustment based on academic performance and academic self-concept in children of single parents is possible?

2. Methods and Materials

2.1. Study Design and Participants

The present research was applied and descriptive-correlational in nature. The study population consisted of all students (ages 12 to 15) in Sanandaj during the academic year (2021-2023), among whom 200 students were selected using a purposive sampling method.

In this study, students (ages 12 to 15) in Sanandaj during the academic year (2023-2024) were surveyed, with 200 students being selected through purposive sampling. Due to COVID-19 conditions, participants completed the questionnaires online and non-physically. After explaining the research objectives to the participants and ensuring privacy and confidentiality, the questionnaire links were provided to the participants under the required conditions, and they were asked to complete them anonymously.

2.2. Measures

2.2.1. Social Adjustment

This tool was developed by Peck and Wiseman in 1999 for assessing maladjustment and preliminary empirical studies. It evaluates interpersonal relationships across various roles, including emotions, satisfaction, conflict, and performance. The test structure reveals two distinct dimensions: role domains (e.g., work, family) and five dimensions of adjustment selected for each role domain (appropriate to the role). Two methods were used for scoring this scale: 1- Calculating the mean score: to obtain the average score for each section (e.g., work, leisure...), sum all the statements related to the desired subscale and divide by the total number of statements for that subscale. 2- Calculating the total score: to obtain the total test score, sum all the question scores and divide by the number of questions the subject has answered. Interpretation: A high score in each subscale indicates low social adjustment of the subject in the respective domain, and a high overall score indicates that the subject has unsatisfactory social adjustment. Cronbach's alpha coefficient was reported as 0.48 and the test-retest reliability average as 0.80. Also, the alpha coefficient for the self-assessment version in a study conducted in Japan was 0.73 (Peck & Wiseman, 2000). The validity and reliability of this questionnaire were obtained in the research by Zemestani et al. (2013). Riyahi Nia in the research of Riyahi Nia (2002) used correlation and Cronbach's alpha method to calculate the validity and reliability of this test. The results included the highest validity values in leisure compatibility (0.50) and the lowest in family relations (0.46). Also, in the research of Zemestani et al. (2013), the reliability of the Social Adjustment Questionnaire was calculated using Cronbach's alpha and

split-half methods, resulting in 0.81 and 0.79, respectively. Cronbach's alpha in the present study was 0.80 (Basharpoor & Heidari, 2022; Ostadian Khani & Fadie Moghadam, 2017).

2.2.2. Academic Performance

It is designed to assess students' academic performance and contains 50 questions. This questionnaire is unidimensional, and the questions are scored based on a binary Likert scale (yes score 1, no score 0). Salehi (2015) obtained the face validity of this questionnaire using the sigma count method with the opinion of five university professors as 0.87 and its reliability using Cronbach's alpha method as 0.86. The reliability of this tool in the present study was obtained as 0.81 using Cronbach's alpha test (Abdolmaleki et al., 2023).

2.2.3. Academic Self-Concept

This questionnaire has 15 questions and aims to assess various dimensions of academic self-concept (general, academic, non-academic). The scoring range is based on a five-point Likert scale. In the research of Afsharizade et al. (2013), the content validity, construct validity, and convergent validity of this questionnaire were assessed and confirmed with the Rosenberg Self-Esteem Questionnaire. The reliability was calculated using Cronbach's alpha, resulting in 0.78. This questionnaire was also used by Marashian et al. (2012) in a sample of 36 individuals, where the Cronbach's alpha coefficient was 92%. Cronbach's alpha in the present research was 0.87 (Basharpoor & Heidari, 2022).

2.3. Data analysis

For inferential statistics analysis, simultaneous multiple regression was performed using SPSS version 23.

3. Findings and Results

The mean and standard deviation of participants' ages were 14.22 (SD = 2.59). 48.9% of participants lived with their mother, and 51.1% with their father. Descriptive findings of the research variables are reported in Table 1.

Table 1

Descriptive Findings of Research Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Skewness	Kurtosis	Tolerance Coefficient	VIF	Durbin-Watson
Social Adjustment	52.8	17.247	20	76	-0.101	-1.287	Criterion	Criterion	
Academic Performance	29.75	10.913	11	48	-0.283	-0.956	0.828	1.208	1.621
General Self-Concept	13.45	6.407	6	35	1.942	4.062	0.692	1.445	
Academic Self-Concept	19.7	7.139	8	32	0.035	-1.244	0.675	1.482	
Non-Academic Self-Concept	4.9	1.952	2	8	-0.104	-1.099	0.929	1.076	

To examine the assumption of normal distribution of single-variable values, skewness and kurtosis were analyzed, and to evaluate the homogeneity assumption, the Variance Inflation Factor (VIF) and Tolerance coefficient were examined. The analysis of the current research data showed that the skewness and kurtosis values of the research variables are within ± 2 , indicating an acceptable distribution of data. Also, given the Variance Inflation Factor value

being less than 10 and the Tolerance coefficient higher than 0.1, multicollinearity did not occur among the research variables. To examine the independence of observations (independence of residuals or errors), the Durbin-Watson test (1.621) was used, indicating adherence to the assumption of error independence.

The correlation between research variables is reported in [Table 2](#).

Table 2

Correlation Between Research Variables

Variable	1	2	3	4	5
Social Adjustment	1				
Academic Performance	-0.389**	1			
General Self-Concept	-0.449**	0.375**	1		
Academic Self-Concept	-0.466**	0.344**	0.513**	1	
Non-Academic Self-Concept	-0.354**	0.170**	0.148*	0.265**	1

* $p < 0.05$, ** $p < 0.01$

Findings indicated a negative correlation between social adjustment and academic performance ($r = -0.389$) significant at the 0.01 level. The correlation between social adjustment and general self-concept ($r = -0.449$), academic self-concept ($r = -0.466$), and non-academic self-concept (r

$= -0.354$) was negative and significant at the 0.01 level. Multiple regression analysis using a simultaneous method was utilized to determine the contribution of each variable in predicting social adjustment ([Table 3](#)).

Table 3

Results of Regression Model Test for Predicting Social Adjustment Based on Academic Performance and Academic Self-Concept in Single-Parent Children

Model	Sum of Squares	Degrees of Freedom	Mean Squares	F	Significance Level	R	R ²	Adjusted R ²
Regression	21986.245	4	5496.561	28.808	0.001	0.609	0.371	0.359
Residual	37205.755	195	190.799					
Total	59192	199						

According to [Table 3](#) ($F = 28.808$, $p = 0.001$), the model is statistically significant, indicating that at least one of the predictor variables significantly predicts the criterion variable. Furthermore, the determination coefficient of 0.371

suggests that academic performance and academic self-concept can explain 37.1% of the variance in social adjustment. The unique role of each predictor variable was determined using the t-test ([Table 4](#)).

Table 4

Standard and Unstandardized Coefficients and T-Statistic for Predicting Social Adjustment Based on Academic Performance and Academic Self-Concept in Single-Parent Children

Predictor Variable	Coefficient b	SE	Coefficient β	T	Significance Level
Constant	91.912	3.899		23.571	0.001
Academic Performance	-0.341	0.099	-0.216	-3.454	0.001
General Self-Concept	-0.601	0.184	-0.223	-3.27	0.001
Academic Self-Concept	-0.51	0.167	-0.211	-3.057	0.003
Non-Academic Self-Concept	-2.213	0.521	-0.25	-4.251	0.001

Based on the results in [Table 4](#), the t-test for significance in regression for academic performance and academic self-concept coefficients is significant at the level of less than 0.01.

4. Discussion and Conclusion

The current study aimed to predict social adjustment based on academic performance and academic self-concept in children of single parents. The results obtained from this research show that academic performance and academic self-concept can explain 37.1% of the variance in social adjustment. Various explanations for the findings of this research have been proposed; among them, studies on single-parent children indicate the significant role of supportive behaviors in personality formation and social adjustment. The presence of social support has a profound effect on these individuals ([Khedri & Asgari, 2011](#)). Students with high social adjustment, due to their better cognitive evaluation of environmental situations and having better mechanisms to deal with these phenomena, can better manage and stay safe from the unpleasant consequences of parental absence, which cannot pose a serious problem for them ([Esteki Azad et al., 2021](#)). Although the adaptation process begins in childhood, the teenage years are considered the most critical phase of social development and growth. During this period, the teenager is very concerned about themselves and tries to emotionally separate from their primary family, expand their intimate relationships with the outside world, which leads to changes in their relationships with family members and causes teenage maladjustment with parents ([Jamali Paghale et al., 2015](#)).

This finding is consistent with the results of previous studies ([Kim & Park, 2009](#); [Macklem, 2007](#); [Rodríguez et al., 2017](#); [Seddighi Arfa'i et al., 2011](#); [Zhou et al., 2010](#)). When individuals enjoy optimal adjustment, they establish good relationships with their surroundings and are more

capable of addressing their needs. Adjustment brings peace and self-confidence, enabling the individual to perform better in academic performance and skill acquisition in the educational environment. A well-adjusted individual easily establishes constructive relationships with teachers and classmates, and these interactive links positively influence the individual's academic progress and performance. Additionally, adaptable individuals are flexible, realistic, responsible, and respect themselves, which also aids in achieving desirable academic performance ([Majidi et al., 2015](#)). According to the results of Tanyi's research (2002), individuals with high social adjustment exhibit more appropriate behaviors and have a positive attitude towards themselves, analyzing weaknesses, abilities, and limitations correctly, accepting and correcting them ([Tanyi, 2002](#)). Desirable academic performance enables students to identify expectations, opportunities, and existing capabilities, choose desirable educational goals within their reach, have a realistic view towards them, and strive to achieve the set goals, leading to progress and desirable academic performance in the educational field ([Mohammadi et al., 2016](#)).

This finding aligns with the results of previous studies ([Boulter, 2002](#); [Mousavi & Badri, 2016](#); [Nasiri et al., 2017](#); [Wouters et al., 2011](#)), students' academic self-concept reflects their past and current performances in academic situations. The impact of social adjustment on students' academic self-concept may become clearer when students have the opportunity to be placed in assessment situations, allowing them to compare changes with previous states, acquire more positive perceptions of their academic abilities, and report them ([Khojasteh Mehr et al., 2012](#)). Emphasizing academic self-concept and examining positive and negative behavioral traits from situations where students can identify their maladaptive behaviors without mediation and pressure, using social skills, learn more about adapting to the environment and themselves, and apply it. According to

Rogers' perspective on the importance of self in social adjustment, self is the core of personality and the most fundamental factor in human behavior and adjustment to the environment; he believes that psychologically healthy individuals can perceive themselves, others, and events in their environment as they truly are and adapt to them. In other words, individuals with a higher academic self-concept compared to others consider themselves more effective, confident, and capable in tasks, and such an academic self-concept leads to the individual's academic growth and progress, the non-emergence of negative emotions, and hence, the development of social skills and adjustment. Accordingly, individuals who start their education with positive thinking and perception of themselves and their capabilities, such positive thinking leads to more academic progress and greater adjustment in them. In general, academic self-concept, as it influences the level of effort and perseverance in facing tasks (learning), choosing a field of study and career (profession), and the ability to achieve necessary competencies (independence), seems to be an effective variable on social adjustment. Therefore, academic self-concept can be related to social adjustment and influence it (MualīFah et al., 2019).

In Rogers and Kelly's view, self-concept plays a significant role in integrating human function; as the child grows, they acquire more experiences and develop personal perceptions of themselves as an individual. These perceptions, formed in connection with others, can affect individuals' actions and choices for comparison, thus psychologists consider self-concept to have motivational characteristics (Haktanir et al., 2018). Therefore, among the factors involved in forming self-perception, the comparisons individuals make about themselves and others play a role. The cognition and perception that an individual has of their characteristics only make sense when compared with others. Therefore, students use social comparison to determine their academic self-concept, improve performance, and self-enhancement.

5. Limitations & Suggestions

One of the main limitations of this research is the use of the correlational method. Therefore, the relationships obtained between variables cannot be considered causal relationships. These relationships may be due to other factors. Another limitation of the current research is the use of self-report instruments. Many of these tools provide responses that others think should be correct. Subjects may

not have the necessary self-awareness and may not respond responsibly to questions. It is suggested that future research compare individual, family, and educational factors affecting the social adjustment of single-parent and two-parent students and compare their results.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethics Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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Authors' Contributions

All authors contributed equally.

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