The Relative Contribution of Psychological Empowerment, Academic Persistence, and Future Orientation in Predicting Academic Adjustment among Adolescents

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Abstract

This study explores the relationship between psychological empowerment, academic persistence, future orientation, and academic adjustment in adolescents. As well as revealing the presence of gender and age differences in these variables. The study also aimed to determine whether psychological empowerment, academic persistence, and future orientation contribute to predicting academic adjustment. A total of 180 adolescents' students in grades 7 through 11 from some public middle and high schools in Kafr El-Sheikh city, Egypt, were included in the study. Scales of psychological empowerment, academic persistence, future orientation, and academic adjustment were used to collect data. The given data was examined using the appropriate statistical tests. The findings revealed a positive correlation between the studied variables. The findings also showed no differences in psychological empowerment, academic persistence, future orientation, or academic adjustment between males and females. In addition, there were no significant differences between students in middle and high school in psychological empowerment, whereas differences were found in academic persistence, future orientation, and academic adjustment in favor of high school students. Finally, the findings indicated the contribution of psychological empowerment, academic persistence, and future orientation in predicting academic adjustment. Some recommendations and suggestions were provided, considering the findings.

Keywords: psychological empowerment, academic persistence, future orientation, academic adjustment

1. Introduction and Literature Review

Adolescence is one of the most sensitive stages in an individual’s life due to the changes that occur in physical and mental development, in addition to social and behavioral aspects. The adolescent also realizes his interests related to study, which are then reflected in his studies later on. Therefore, it is necessary to provide appropriate psychological and academic counseling during this period to avoid mental and physical disorders later on and ensure the formation of a strong personality.

This study will address four important variables for adolescents’ students, as follows:

1.1 Psychological Empowerment

Empowerment is a higher-order multilevel framework used to assess people as they participate in and carry out the participatory process as individuals, groups, organizations, and communities (Lardier et al., 2020). Zimmerman (2000) developed the empowerment theory, which offers a framework for comprehending and encouraging adolescents' healthy growth throughout this stage of life. Psychological empowerment is an important variable for adolescents; it enhances students’ academic performance, responsible decision making, mental health, well-being, positive adjustment, motivation, self-efficacy, flexibility, self-esteem, and engagement in learning (Alomosh & Sallam, 2022; Hameli et al., 2023; Messman et al., 2022; Tseng et al., 2021; Zimmerman, 2000). As well as psychological empowerment, it prepares youth as leaders, enabling them to build group norms, team identification, and leadership competence. It also helps in understanding the community and identifying community conditions. Psychological empowerment contributes to building intergenerational partnerships, fostering confidence in communication, recognizing power differences, and exercising decision-making power. It also helps in planning for change and building community support for projects (Zimmerman et al., 2018).
Psychological empowerment refers to a set of psychological processes required for people to experience control over their work (Spreitzer, 2007). Zimmerman (2000) defines psychological empowerment as an individual's belief in their personal competence, control over their life, and understanding of their social reality.

Four components of Spreitzer's psychological empowerment model are influence, competence, self-determination, and meaning. Meaning is the congruence of a person's role with values, beliefs, and actions. Competence is the belief in one's ability to perform tasks with skill and mastery, self-determination involves exercising control over work methods, and influence is the degree to which an individual's behavior affects their work (Spreitzer, 1995). Zimmerman (1995, 2000) proposed a three-component framework consisting of interpersonal, interactional, and behavioral components. Interpersonal empowerment involves self-perceptions and self-motivation to achieve desired results. Interactional empowerment involves understanding the social resources and capital needed to achieve goals. Behavioral empowerment involves actions to influence outcomes, such as leadership and community-focused change. By developing confidence, critical thinking skills, and adult resources, individuals can integrate these components to make meaningful change.

The three components of psychological empowerment merge together to form the image of an individual who is confident in his ability to influence a specific context, his ability to understand how this system works in the context, integrate it into behaviors to impose control over this context, and understand the network of mutual relationships between these components and measure them to form a complete picture. For psychological empowerment (Eisman et al., 2016). Zimmerman et al. (2018) developed a psychological empowerment program for a sample of 367 middle school students to promote positive societal change as a means of promoting positive development and integrate youth empowerment solutions through content that focuses on building skills and confidence (the personal component) and activities to help youth think more clearly. Critically, develop communication with their community (interactive component), and design and implement a community change project (behavioral component). Psychological empowerment empowers individuals to control their destiny and make life-changing decisions through experiences and experiments. It provides mutual support, knowledge, and influence on quality of life, with events and problem-solving skills being crucial processes. (Morrison, 2014)

1.2 Academic Persistence

Academic persistence is a crucial variable for the adolescent student. It is a characteristic of individuals who have the ability to confront difficult situations and the ability to adjust to them. It is evidence of psychological adjustment, the extent to which the individual enjoys psychological health, and the cohesion of the individual's internal structure in the physical, mental, social, emotional, and academic aspects. Morales (2008) emphasized the importance of academic perseverance and defined it as the ability to achieve high academic achievement for an individual despite the presence of risk factors. Thus, academic persistence is the ability of students to persist in their studies despite challenges, often linked to their mastery of skills and content areas (Véronneau et al., 2014).

The concept of academic persistence has gained recognition in recent years as a critical factor in student academic performance, although it includes a set of non-cognitive factors that motivate students to give up on achieving short-term goals and strive to achieve long-term, higher-order goals despite the presence of factors that hinder their efforts. Continuous effort (Dweck et al., 2014). It refers to long-term, diligent work and mindset skills that enable students to focus on long-term goals and overcome challenges (Dweck et al., 2014). Some individuals tend to persist in some difficult tasks to achieve the desired results, and they differ in their ability to choose and pursue current goals and plan for future goals (Constantin et al., 2011). There are factors that increase students’ academic persistence, including their need for support related to relationships, personal interactions with peers and faculty members, environmental factors, and school support (Jindal-Snape & Miller, 2008). Engagement in curricular activities also influences academic persistence (Bandura, 1999). Martin & Marsh (2006) pointed out some variables that can predict academic persistence, such as competence, planning ability, self-control, low anxiety, resilience, and achievement motivation. According to Roese et al. (2000), academic persistence diminishes in the adolescent years. So, attention must be paid to developing the student's academic persistence during adolescence.

1.3 Future Orientation

Adolescence is considered the most important stage of life in terms of future orientation (Hasman & Shell, 2008). It is a stage full of challenges and tensions that can generate pressure and reduce adolescents’ future expectations (Florêncio et al., 2017). The term “future orientation” describes how a person consciously represents future occurrences, including recurring motivations, feelings, and ideas (Bozzato, 2024). It refers to a person's deliberate representation of future events, which includes ideas, goals, ambitions, drives, and feelings (Seginer, 2009). Future orientation includes a variety of psychological concepts (Lopeze et al., 2009). Also, it is multifaceted and directs the individual’s developmental path through goal setting, preparation, investigation, and dedication to the future
Future orientation develops during the person's life, beginning in childhood and continuing into old age (Haith et al., 1994). The individual can see his future and set outlines, goals, and plans. The capacity to look constructively toward the future and the anticipation that actions will lead to the attainment of broader goals are clear markers of positive growth. So, future orientation is defined as thinking about the future and the impact of decisions (Shubert et al., 2019). Therefore, it is important to develop a positive future orientation in students because it has a positive impact on their success in their studies and their future. The study by Pawlak and Moustafa (2023) indicated that higher degrees of future orientation were associated with higher levels of involvement, attendance, and GPA. This implies that those with a future-focused orientation are probably going to perform well in educational environments. Due to their perceived need to prepare for adulthood and their better developed cognitive abilities than children. Adolescents shift at this stage of development from thinking in concrete terms to thinking in more abstract terms, which helps them to think through potential scenarios in which their present ideas and behaviors relate to their future goals (Nurmi, 1991). Through the integration of future-oriented thinking into their present actions, adolescents can create personal goals and plans, demonstrate the capability to defer short-term gains for long-term gains, and make calculated choices that may pay off in the future (Schoon & Parsons, 2002). One of the models that interprets future orientation is the three-component model, which defines the future through pictures and content rather than viewing it as an empty temporal space (Seginer, 2009). According to this concept, behavior, cognitive representation, and motivation interact to determine an individual's future orientation. (Seginer, 2009; Seginer & Halabi-Kheir, 1998)

1.4 Academic Adjustment

Academic adjustment is essential for adolescents in order to develop future academic and social skills (Azpiazu et al., 2024). Adjustment is essential to living a happy and successful life. Baker and Syrik (1999) define academic adjustment as positivity regarding academic objectives, requirement fulfillment, the efficacy of attempts to achieve academic objectives, and success in the academic context. Successful academic adjustment demands a sense of purpose and motivation to learn and complete academic requirements. Also, Ng and De Guzman (2017) defined it as students' appropriate reactions to their new classroom setting. This is a protracted, phased process. Thus, the definition of academic adjustment is the direct correlation between student resources and the needs of the academic environment. Academic adjustment is related to external learning outcomes (Crede & Niehorster, 2012). Unadjusted students are more likely to experience academic stress because they believe the academic-related pressure exceeds their coping abilities. Low academic adjustment may lead to higher rates of underachievement (Clinicu & Cazan, 2014). Harvey et al. (2006) indicated that low academic adjustment among students is associated with lower academic performance and exposure to the risk of dropping out. Academic adjustment, however, can have an impact on students' subjective well-being and optimism (Yovita & Asih, 2018). Anderson et al. (2016) identified three components of academic adjustment: (a) academic lifestyle, which refers to the fit between the individual and the temporary role as a student; (b) academic achievement, which refers to performance and satisfaction with academic progress; and (c) academic motivation, defined as the student's desire to complete the academic tasks. As well, Gerdes and Mallinckrodt (1994) identify general concepts of academic adjustment such as motivation to learn, sense of purpose, adherence to academic requirements, and satisfaction with the academic environment. This necessitates the development of practical skills such as learning, writing, summarizing, thinking, memorizing, dealing with large amounts of reading material, taking tests, composing seminar papers, summarizing lectures, and efficiently managing time.

Based on the above, this study explores the relationship between psychological empowerment, academic resistance, and future orientation among adolescents, revealing gender and age differences and suggesting early intervention for improvement.

1.5 Hypothesis

(1) There is a positive relationship between psychological empowerment, academic persistence, future orientation, and academic adjustment among adolescents.

(2) There are no gender differences in psychological empowerment, academic persistence, future orientation, or academic adjustment among adolescents.

(3) There are no age differences in psychological empowerment, academic persistence, future orientation, or academic adjustment among adolescents.

(4) Psychological empowerment, academic persistence, and future orientation contribute to the prediction of academic adjustment among adolescents.
2. Method

2.1 Participants
The total sample consisted of 180 adolescents’ students in grades 7 through 11, a hundred of them from middle school and eighty from high school (80 males and 100 females), who were selected randomly with an average age of 15.85 years and a standard deviation of 1.48. The data were collected in the academic year 2023–2024 from some middle and high schools in the city of Kafr El-Sheikh.

2.2 Measures

2.2.1 Psychological Empowerment Scale
This scale was developed by Spreitzer (1995) and aims to measure psychological empowerment. It consists of 12 statements divided into 4 sub-dimensions: meaning, competence, self-determination, and influence. Each dimension is measured through three statements using a 7-point scale (1 = strongly disagree to 7 = strongly agree). The total for each dimension is divided into three to obtain the average score for that dimension. The participant’s score on the scale ranges from 12 to 84, and a higher score on the scale is an indicator of a higher level of the participant's psychological empowerment. The author translated it into Arabic, and experts in educational psychology and English approved it. A correlation of .83 was found between Arabic and original forms, indicating accuracy in both language and translation. The author verified the internal validity of the scale by calculating the correlation coefficient between the score of each item and the total score of the scale while deleting the item's score from the total score of the dimension to which it belongs, considering that the rest of the items that belong to this dimension are considered a test for the item. The values of the correlation coefficients ranged between 0.535 and 0.817. In terms of split-half reliability and internal consistency, the scale likewise demonstrated strong test-retest reliability (r = 0.83) and internal consistency (coefficient = 0.79).

2.2.2 Academic Persistence Scale
The academic persistence scale aims to measure students’ academic persistence and was developed by Thalib et al. (2018). It consists of three persistent aspects: long-term perspective purposes, current purposes pursuing, and recurrent unattained purposes. The scale includes 45 items divided into favorable elements (1, 2, 3, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 21, 22, 23, 24, 25, 26, 27, 28, 31, 32, 36, 37, 38, 41, and 42) and unfavorable items (4, 5, 19, 20, 29, 30, 33, 34, 35, 39, 40, 43, 44, and 45). The participant answers on a scale for each item, with a range of (0 Very Disagree–4 Very Appropriate) for the favorable items and (4–0) for the unfavorable items. The participant's score on the scale ranges from 0 to 180. The author translated the academic persistence scale into Arabic, and experts in English and educational psychology revised it to ensure back translation. A correlation of .85 between the two forms was calculated. In addition, the correlation coefficients of internal validity varied from 0.585 to 0.818, which was confirmed. High split-half reliability (r = 0.81) and test-retest reliability (r = 0.78) are shown. The questionnaire's internal consistency coefficient was .78. Based on the previous calculations, the scale shows high levels of psychometric properties.

2.2.3 Future Orientation Scale
The Future Orientation Scale is a self-report tool designed to measure adolescents’ future orientation. It was developed by Steinberg et al. (2009) and consists of 15 items that were grouped into three subscales; each subscale includes five items: Planning ahead includes items 1, 6, 7, 12, and 13; time perspective includes items 2, 5, 8, 11, 14, and anticipation of future consequences includes items 3, 4, 9, 10, and 15. Participants are presented with 15 pairs of statements separated by the word BUT and asked to select the best descriptor. Participants are asked if the description is really true or sort of true, and responses are on a 4-point scale from really true for one descriptor to really true for the other descriptor. All items are scored on a scale from 1 to 4. Items scored 1, 3, 4, 6, 8, 11, and 14 are reversed. Higher scores imply a stronger future orientation. The author translated the scale into Arabic, and to ensure its translation accuracy, it was presented to specialized experts in educational psychology and English. The Arabic and original forms had a correlation of 0.83, indicating accuracy in both language and translation. The internal validity of the scale ranges from 0.563 to 0.856, as the scale also demonstrated good test-retest reliability (r = 0.83) and internal consistency (coefficient = 0.76) in terms of split-half reliability and internal consistency, indicating that the scale is highly valid and reliable.

2.2.4 Academic Adjustment Scale
The Academic Adjustment Scale, developed by Anderson et al. (2016), measures students' academic adjustment by focusing on three components: academic lifestyle, academic achievement, and academic motivation, each includes three items. The participant answers the scale on a five-point scale (5 always applies to me, 1 rarely
applies to me), and the students’ scores range between 9 and 45. The score of academic adjustment increases with an increasing score on the scale. The author translated the scale into Arabic, and to ensure its translation validity, it was presented to specialized professors with backgrounds in educational psychology and English to ensure the translation accuracy. And the correlation between the two forms was .81. The internal validity of the scale between .558 and .824, as the scale also showed good test-retest reliability ($r = 0.81$) and internal consistency (coefficient $= 0.78$), which ensure the scale possesses high validity and reliability.

2.3 Limitations

Data was collected in the first semester of the academic year 2023–2024. The findings are determined spatially at Kafr El-Sheikh city in Egypt.

2.4 Statistical Processing

The author used descriptive statistics (means, standard deviations, correlation coefficients, t-test, and multiple regression coefficients) through the SPSS v25 program.

3. Findings and Discussion

3.1 Hypothesis 1: There is a positive relationship between psychological empowerment, academic persistence, future orientation, and academic adjustment among adolescents

The author used “Pearson’s correlation coefficient,” to examine this hypothesis, and the results are as in Table 1.

Table 1. Correlation coefficients between psychological empowerment, academic persistence, future orientation, and academic adjustment (n = 180)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Psychological Empowerment</th>
<th>Academic Persistence</th>
<th>Future Orientation</th>
<th>Academic Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Empowerment</td>
<td>1</td>
<td>.613**</td>
<td>.666**</td>
<td>.624**</td>
</tr>
<tr>
<td>Academic Persistence</td>
<td>.613**</td>
<td>1</td>
<td>.551**</td>
<td>.605**</td>
</tr>
<tr>
<td>Future Orientation</td>
<td>.666**</td>
<td>.551**</td>
<td>1</td>
<td>.653**</td>
</tr>
<tr>
<td>Academic Adjustment</td>
<td>.624**</td>
<td>.605**</td>
<td>.653**</td>
<td>1</td>
</tr>
</tbody>
</table>

**All correlation coefficients are significant at the level of 0.01.

As shown in Table 1,

(1) There is a positive correlation between psychological empowerment and academic persistence; the correlation is .613, significant at the level of 0.01. This result is consistent with Nash and Kallenbach (2009), which indicated that self-determination as a dimension of psychological empowerment is critical to increasing academic persistence. This result is also consistent with Torres and Solberg (2001), which showed that competence, as psychological empowerment’s dimension, is directly related to persistence and social engagement. It is also consistent with the results of the studies of Jones et al. (2018) and Martin & Marsh (2006), which pointed out that academic persistence can be predicted through the level of competence. This result can be explained by the dimensions of psychological empowerment, such as the student’s understanding of the meaning and importance of study for him, his competence, self-determination, and belief in his ability to influence, which push him to persevere and continue performing until he achieves his goals.

(2) There is a positive correlation between psychological empowerment and future orientation; the correlation coefficient is 0.666, which is statistically significant at the significance level of 0.01. This result is consistent with Szoko et al. (2023), which found a significant relationship between psychological empowerment and future orientation in young people and suggested strategies to enhance psychological empowerment to promote emotional health. In addition, the results of ElSayed (2019), which indicated a positive relationship between competence, which is one of the dimensions of psychological empowerment, and the future orientation of high school students. The current result can be explained as the student who is confident in his abilities does his best in study and tends to perform difficult tasks despite all the difficulties. Therefore, psychological empowerment can orient the student toward the future and help him pursue future goals.
(3) There is a positive correlation between psychological empowerment and academic adjustment; the correlation coefficient is 0.624, which is statistically significant at the level of 0.01. This result is similar to the study of Messman et al. (2022), which implies that encouraging adolescent empowerment offers a pathway to positive adjustment development. This result can be explained by the fact that a good level of adolescent’s psychological empowerment supports the student and provides him with the ability to face any obstacles and adjust to his studies.

(4) There is a positive relationship between academic persistence and future orientation; the correlation coefficient is .551, which is significant at the level of 0.01. This finding is related to the study by Andretta et al. (2014), which shows that having a positive future orientation is positively correlated with being highly motivated in the classroom, performing well academically, and having the capacity to plan and organize actions in that direction. That means a student has a positive orientation for the future, persists, continues to work hard, and overcomes all obstacles to achieve his future goals.

(5) There is a positive relationship between academic persistence and academic adjustment, with a correlation of .605, which is significant at the level of 0.01. This result is similar to the study by Jindal-Snape and Miller (2008), which defined the relationship between academic persistence and adjustment as a process that reflects positive adjustment despite experiences of adversity. This can be explained by the fact that the presence of high levels of academic persistence prompts the student to adjust to the obstacles that he may face in order to achieve his goals. Therefore, persistence is a dynamic process in which individuals demonstrate positive adjustment despite the adversity they face.

(6) There is a positive correlation between future orientation and academic adjustment; the correlation coefficient is 0.653, which is statistically significant at the level of 0.01. This result is consistent with the studies by Coulter et al. (2023), which indicated that adolescents with high future orientation levels show better adjustment, and Azpiazu et al. (2024), which indicated that academic adjustment is essential for adolescents in order to develop future academic-professional skills and later social skills. And the study of Oshri et al. (2018), which indicated that the future orientation of youth displays their adjustment over the period of adolescence. This can be explained by the student’s orientation toward the future and his ability to plan his goals, prompting him to adapt to obstacles that may hinder his success. From the previous findings, we have to accept the first hypothesis.

3.2 Hypothesis 2: There are no gender differences in psychological empowerment, academic persistence, future orientation, or academic adjustment among adolescents

The author used t- test to detect the differences to examine this hypothesis, and the results are as shown in Table 2.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Males Mean</th>
<th>Males Std. deviation</th>
<th>Females Mean</th>
<th>Females Std. deviation</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Empowerment</td>
<td>52.30</td>
<td>3.72</td>
<td>52.12</td>
<td>4.35</td>
<td>0.158</td>
</tr>
<tr>
<td>Academic Persistence</td>
<td>67.05</td>
<td>16.73</td>
<td>69.37</td>
<td>15.04</td>
<td>0.978</td>
</tr>
<tr>
<td>Future Orientation</td>
<td>41.06</td>
<td>5.25</td>
<td>38.25</td>
<td>5.27</td>
<td>3.562</td>
</tr>
<tr>
<td>Academic Adjustment</td>
<td>34.30</td>
<td>4.74</td>
<td>32.86</td>
<td>4.24</td>
<td>2.146</td>
</tr>
</tbody>
</table>

As shown in Table 2,

(1) There are no differences between males and females in psychological empowerment. This finding is in accordance with the studies of Boudrias (2004) and Al-Anzi (2022), which revealed no gender differences in psychological empowerment. This finding may be due to the similarity of social, cultural, support, and educational conditions that males and females live in.

(2) No differences in academic persistence between males and females were found. This finding differs from the study of Ashraf and Batool (2020), which shows a gender difference in favor of females. And it differs from the study of AL Masaudi (2019), which presented differences in the direction of
males. The same social, cultural, support, and educational environments that males and females experience can also be used to explain this finding.

3) No differences in future orientation between adolescent males and females were found. This finding differs from the study of Sondaite (2001), which identified differences between males and females’ future hopes. The girls included education in their hopes for the future. The males included more property-related issues in their hopes for the future. The comparable social, cultural, and educational environments that males and females live in can be used to explain why there are no disparities in future orientation due to gender.

4) There are no differences between adolescent males and females in academic adjustment. This finding is consistent with the studies of Sarkar and Banik (2017), Ahmad and Rana (2023), and Azad (2024), which indicated no difference between males and females in academic adjustment. Whereas the current findings differ from the study of Calaguas (2011), which showed that males had higher levels of academic adjustment than females. Furthermore, the same social, cultural, supportive, and educational environments that males and females live in help to explain this finding. From the previous findings, we have to accept the second hypothesis.

3.3 Hypothesis 3: There are no age differences in psychological empowerment, academic persistence, future orientation, or academic adjustment among adolescents

To examine this hypothesis, the author used the t-test to detect the differences, and the results are as shown in Table 3.

Table 3. Age differences in psychological empowerment, academic persistence, future orientation, and academic adjustment

<table>
<thead>
<tr>
<th>variable</th>
<th>Middle school students</th>
<th>High school students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N =100</td>
<td>N = 80</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Std. deviation</td>
</tr>
<tr>
<td>Psychological Empowerment</td>
<td>51.96</td>
<td>3.92</td>
</tr>
<tr>
<td>Academic Persistence</td>
<td>66.14</td>
<td>15.88</td>
</tr>
<tr>
<td>Future Orientation</td>
<td>36.65</td>
<td>4.41</td>
</tr>
<tr>
<td>Academic Adjustment</td>
<td>32.66</td>
<td>4.39</td>
</tr>
</tbody>
</table>

As shown in Table 3,

1) There are no significant differences in age between adolescent in middle and high schools in terms of psychological empowerment. This finding is consistent with the results of Al-Anzi (2022), which presented that there are no significant differences between students of the first, third, fifth, and seventh levels in psychological empowerment. Whereas current findings differ from the findings of Cayaban et al. (2022), which indicated that psychological empowerment is affected by the student’s academic year. The lack of differences in psychological empowerment between adolescent students in middle and high school can be explained by the similarity of activities and services provided to students in two stages, especially since they live in similar conditions in the same environment.

2) There are significant differences in age between adolescent students in middle and high schools in terms of academic persistence, in favor of adolescent students in high schools. This finding is consistent with the results of Shubert et al. (2020), which indicated that persistence grows in early adolescence, followed by stability in later adolescence. This result can be explained by the fact that students in high school have become more mature, aware, and monitor their goals, and then they persist and overcome all the obstacles they face in order to achieve their goals.

3) There are significant differences in age between adolescents in middle and high schools in terms of future orientation, in favor of adolescent students in high schools. This finding is consistent with the results of Shubert et al. (2020), which indicated that future orientation grows in early adolescence, followed by stability in later adolescence. As well, the results of Steinberg et al. (2009) revealed that younger
adolescents show a weaker future orientation compared to individuals who are 16 years of age or older, as they are less interested in the future and less likely to anticipate the consequences of their decisions, whereas future planning continues to develop into adulthood. In addition to the study of Haith et al. (1994), which presented that future orientation develops during a person's life, beginning in childhood and continuing into old age. According to Nurmi's (1989) study, planning and hope knowledge levels rise with age, and wishes for education were mentioned more frequently when a person was 15 years old than when they were 11 years old. This result can be explained by the fact that high school students nowadays are more self-aware, mature, and future-focused.

(4) There are significant differences in age between adolescents in middle and high schools in terms of academic adjustment, in favor of high school students. This finding is consistent with the results of Calaguas (2011), which indicated a significant relationship between age and academic adjustment. Given that adolescent students in high school spent many years studying and learned new methods, activities, and strategies that enable them to adjust to the academic problems they face, in addition to increasing their experience in building good social relationships with their colleagues, and teachers.

3.4 Hypothesis 4: psychological empowerment, academic persistence, and future orientation contribute to the prediction of academic adjustment among adolescents

To examine this hypothesis, the author used multiple regression to indicate the effect or relationship between the independent variables (psychological empowerment, academic persistence, and future orientation) and the dependent variable (academic adjustment), and the results are as shown in Table 4.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source of difference</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Empowerment</td>
<td>Regression</td>
<td>1423.66</td>
<td>1</td>
<td>1423.66</td>
<td>113.672</td>
<td>10.66</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>2229.33</td>
<td>178</td>
<td>12.524</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3653.00</td>
<td>179</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Persistence</td>
<td>Regression</td>
<td>1334.88</td>
<td>1</td>
<td>1334.88</td>
<td>102.50</td>
<td>10.12</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>2318.11</td>
<td>178</td>
<td>13.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3653.00</td>
<td>179</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future Orientation</td>
<td>Regression</td>
<td>1558.54</td>
<td>1</td>
<td>1558.54</td>
<td>132.45</td>
<td>11.50</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>2094.45</td>
<td>178</td>
<td>11.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3653.00</td>
<td>179</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 4,

There is a regression relationship between the independent variables (psychological empowerment, academic persistence, and future orientation) and the dependent variable (academic adjustment), and the “F” values are significant at the level of 0.001.
Table 5. Predicting academic adjustment through psychological empowerment, academic persistence, and future orientation

<table>
<thead>
<tr>
<th>Variable</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted Square</th>
<th>R</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>Contribution percentage</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>21.69</td>
<td>3.214</td>
<td>3.60</td>
<td>0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological</td>
<td>.731</td>
<td>.535</td>
<td>.527</td>
<td>.704</td>
<td>.085</td>
<td>.624</td>
<td>52.7%</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>Empowerment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Persistence</td>
<td>.605</td>
<td>.365</td>
<td>.362</td>
<td>.173</td>
<td>.019</td>
<td>.605</td>
<td>36.2%</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>Future Orientation</td>
<td>.653</td>
<td>.427</td>
<td>.423</td>
<td>.543</td>
<td>.059</td>
<td>.653</td>
<td>42.3%</td>
<td>0.001</td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 5, the regression coefficients are significant at the (0.001) level. It is also clear that the t value is statistically significant at the (0.001) level. As is clear from Table 5, the “Beta” values for the regression coefficients of psychological empowerment, academic persistence, and future orientation are statistically significant, and this indicates reliance on research variables in predicting academic adjustment. As well, the findings show that psychological empowerment, academic persistence, and future orientation contribute 52.7%, 36.2%, and 42.3%, respectively, to predicting academic adjustment. So, the predictive equation can be formulated as follows:

The predictive equation for academic adjustment is $21.69 + 0.704 \times \text{psychological empowerment} + 0.173 \times \text{academic persistence} + 0.543 \times \text{future orientation}$.

This finding is in accordance with the study by Al-Ghamdi (2022), which detected that competence, which is one of the components of psychological empowerment, predicts the level of academic adjustment. As well as the study by Coulter et al. (2023), which indicated that adolescents with high future orientation levels show better academic adjustment. Moreover, the study of Oshri et al. (2018) indicated that the future orientation of youth displays their adjustment over the period of adolescence. Therefore, adolescents’ possession of an adequate level of psychological empowerment, academic persistence, and future orientation provides them with the necessary academic adjustment to achieve success, complete their studies, and achieve their goals. Future orientation predicts academic adjustment. It can be explained that a student who is oriented toward his future and plans to obtain the highest grades to enroll in the preferred college in the future that suit his aptitudes, inclinations, and abilities to prove himself and plans for these successes provides him with a driving force that directs him toward making decisions related to his academic performance. So, as previously stated, adolescent academic adjustment is influenced by interconnected variables, including psychological empowerment, persistence, and future orientation, which can be supported by educators and parents. Based on previous findings, we have accepted this hypothesis.

4. Recommendations

1. Providing counseling programs for adolescent students to clarify the importance of psychological empowerment, academic persistence, positive future orientation, and academic adjustment and its impact on their goals.
2. Providing a psychological and academic specialist to provide the necessary support to adolescent students.
3. There is a need for parents and teachers to build good relationships and effective communication with their children and students.
4. It is necessary for schools to measure periodically the levels of psychological empowerment, academic perseverance, and future orientation of adolescent students, as this has an impact on predicting their level of academic adjustment.

5. Conclusion

The current study aims to explore the relationship between psychological empowerment, academic persistence, future orientation, and academic adjustment in adolescents. As well as revealing the presence of differences due to gender or age in these variables. The study also aimed to determine whether psychological empowerment, academic persistence, and future orientation contribute to predicting academic adjustment. A total of 180 students in grades 7 through 11 from some public middle and high schools were included in the study. The findings revealed a positive correlation between all variables. The findings also detected no significant gender differences in
psychological empowerment, academic persistence, future orientation, or academic adjustment. In addition, no significant differences between students in middle and high school in psychological empowerment were detected, whereas significant differences were found in academic persistence, future orientation, and academic adjustment in favor of high school students. Finally, the results indicated the contribution of psychological empowerment, academic persistence, and future orientation in predicting academic adjustment. Hence, the current results indicate the importance of supporting psychological empowerment, academic persistence, and future orientation in achieving academic adjustment among adolescents, which in turn positively affects achieving academic success and commitment to future paths.

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Conflicts of Interest
The author declares no conflict of interest.

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Obtained.

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Data Availability Statement
The data that support the findings of this study are available on request.

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