

# Development and Impact of Education for Adolescents in the Transition to Adulthood: A Systematic Literature Review

Muhamad Faqihudin<sup>1\*</sup>, Mahasri Shobahiya<sup>1</sup>, Taufik<sup>1</sup>, Alfian Rifai<sup>1</sup>

<sup>1</sup> Faculty of Islamic Education, Universitas Muhammadiyah Surakarta, Surakarta, Indonesia

## Abstract

This study aims to explore the role of education in supporting adolescents' transition to adulthood, focusing on its impact on psychosocial development, identity formation, and emotional regulation. The approach used is a systematic literature review (SLR) with the PRISMA 2020 guidelines to ensure transparency and accuracy in data synthesis. A literature search was conducted on the Scopus database, which yielded 10 articles that met the inclusion criteria related to formal education and adolescent development. The results showed that education has a significant influence on shaping self-identity, improving emotional regulation, and preparing adolescents for mature decision-making, especially regarding careers and social responsibilities. In addition, education also improves psychological well-being, with interventions that combine social-emotional learning and experiences that enhance adolescents' emotional resilience. These findings also highlight the importance of the role of family and an inclusive educational environment in supporting adolescent development. Based on these findings, it is recommended that education policies place greater emphasis on psychosocial aspects rather than just academics, by creating an educational environment that supports the development of adolescents' identity, autonomy, and emotional well-being. Education that focuses on social-emotional development can accelerate adolescents' transition to healthier and more responsible adulthood.

Keywords: adolescent\_transition, education, psychosocial\_development.

## Introduction

The transition from adolescence to adulthood is an important developmental stage involving identity formation, emotional regulation, and the achievement of autonomy and social responsibility (Ruiz & Yabut, 2024; Seyed Mousavi et al., 2024; Sia & Aneesh, 2024; Silva et al., 2024). Education, particularly higher education, plays a crucial role in preparing individuals for adult life (Silver, 2025). Along with global social and demographic changes, such as delayed marriage, extended education, and increased individualization, this transition period is getting longer (Fulda et al., 2019; Jiang, 2024; Khumalo, 2025; Lai et al., 2023). Data shows, for example, that the global youth unemployment rate stands at around 11% according to the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) (Nations, n.d.), with youth unemployment in Indonesia in 2020 reaching 15.86% according to the Central Statistics Agency (BPS, 2020), and the average length of education in Indonesia now being nearly 11 years according to a report by the Central Statistics Agency (BPS, 2022). Additionally, according to UNESCO (2023), there are more than 1.3 billion adolescents worldwide, with more than 60% enrolled in formal education, yet nearly half of them experience difficulties in emotional well-being, career uncertainty, and delayed social independence. In Indonesia, the Central Statistics Agency (BPS, 2022) reports that the youth unemployment rate (ages 15–24) has reached 16.2%, indicating that education alone does not fully prepare young people for a successful transition to the workforce or higher education (Yanindah, 2022). This data underscores the global urgency to understand the psychosocial impact of education on adolescent development beyond academic achievement alone.

Recent empirical and meta-analytic evidence has highlighted the significant influence of education on psychosocial development, identity formation, and decision-making skills during adolescence. For example, a longitudinal study by Sugimura et al. (2023) found that higher identity synthesis during secondary education significantly predicted greater academic engagement and reduced fatigue after graduation ( $\beta = 0.42$ ,  $p < 0.001$ ). Similarly, a meta-analysis by Crocetti & Lise (2025) reviewing 17 studies with 3,617 participants reported moderate effect sizes (Cohen's  $d = 0.56$ – $0.63$ ,  $p < 0.001$ ) for educational interventions promoting identity and career development. This indicates that structured educational experiences have a measurable positive impact on adolescents' capacity for self-exploration, commitment, and psychosocial adjustment.

Furthermore, empirical evidence supports the role of formal education in shaping emotional regulation and autonomy. A study by Ruiz & Yabut (2024) shows that identity commitment is positively related to psychological well-being ( $r = 0.47$ ,  $p < 0.01$ ), while emotional autonomy without identity support has a negative impact on mental health. Similarly, research by Ahn, Plamondon, & Ratelle (2023) found that educational environments and parents who support autonomy increase career decision-making competence and reduce uncertainty. In this regard, Nur'afiah & Hernawati (2024) found

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\* Corresponding author: [o100250031@student.ums.ac.id](mailto:o100250031@student.ums.ac.id)

that identity achievement status and autonomy support from fathers significantly predict higher career maturity ( $\beta = 0.41$ ,  $p < 0.05$ ) among university students.

Beyond psychological outcomes, education is also a determining factor in adolescents' capacity for rational decision-making and long-term planning. Research by Ahn et al. (2025) shows that autonomy and self-efficacy together predict a stronger agent profile in career exploration during the post-secondary transition. Additionally, a literature review by Costa & Ribeiro (2025) emphasizes that a lack of educational and psychosocial support correlates with increased anxiety and uncertainty in career choice, highlighting the importance of coordinated intervention between families and schools.

Additionally, substantial longitudinal evidence from the *Journal of Child and Family Studies* by Alonso-Stuyck et al. (2018) found that adolescents who exhibited a balanced autonomy profile (low emotional separation and high autonomy in decision-making) reported significantly higher levels of self-esteem and identity commitment compared to those with high emotional separation. Collectively, these findings confirm that education—through its structure, pedagogy, and relational climate—plays a crucial role in fostering adolescents' psychosocial growth and their readiness for adult life.

Although these findings are promising, there are still several important gaps in the literature. First, most studies emphasize cognitive and academic outcomes, leaving psychosocial dimensions (e.g., identity formation, emotion regulation, independence) largely unexplored. Second, cross-cultural and contextual research is still limited, particularly in developing countries that have significant differences in educational environments and family dynamics. Third, there is considerable heterogeneity in study methodologies, durations, and measurement tools, which complicates generalization and synthesis of evidence. Fourth, moderator and mediator variables—such as socioeconomic status, parental involvement, school climate, and cultural norms—are rarely examined systematically despite their strong theoretical relevance (Beyers et al., 2025). Methodologically, many studies rely on cross-sectional or quasi-experimental designs, which limit causal inferences and longitudinal understanding of developmental trajectories.

Given this gap, a systematic literature review that specifically focuses on the role of education in the transition from adolescence to adulthood is urgently needed. This review aims to answer four main research questions: RQ1: How does education develop and impact the process of adolescent transition to adulthood based on empirical research findings in international literature? RQ2: How does formal education (secondary school and college) influence adolescent psychosocial development, particularly in identity formation, emotional regulation, and independence? RQ3: How does education influence adolescents' decision-making abilities regarding career choices, further education, and social responsibility in early adulthood? RQ4: What factors (social, economic, cultural, school environment, and family) moderate or mediate the relationship between education and successful transition to adulthood? By synthesizing the latest global evidence, this review aims to clarify the developmental mechanisms through education that shape adolescents' paths to adulthood, identify contextual and psychosocial moderators, and provide evidence-based recommendations for policymakers, educators, and future researchers to promote holistic adolescent development.

## Methodology

This study uses a qualitative approach with a systematic literature review (SLR) method to identify the development and impact of education on adolescents in the transition to adulthood (Snyder, 2019). The entire process was carried out based on the PRISMA 2020 guidelines to ensure transparency, accountability, and accuracy in data selection and synthesis (Page et al., 2021). The literature search was conducted on the Scopus database because it has a wide coverage of reputable international journals and is consistently used in high-standard academic research (Baas et al., 2020; Falagas et al., 2008; Mongeon & Paul-Hus, 2016). The search strategy used the following search string:

(TITLE-ABS-KEY(Adolescent education) AND TITLE-ABS-KEY(psychosocial development) AND TITLE-ABS-KEY(impact on adulthood) OR TITLE-ABS-KEY(life outcomes)) AND PUBYEAR > 2020 AND PUBYEAR < 2026 AND (LIMIT-TO(DOCTYPE, "ar")) AND (LIMIT-TO(LANGUAGE, "English")) AND (LIMIT-TO(OA, "all")).

The initial search yielded 223 articles containing keywords related to adolescent education, psychosocial development, and its impact on adulthood. These articles were then selected based on the relevance of their titles and abstracts, with 71 articles eliminated because they did not directly examine adolescent education or assess the impact of education on psychosocial development or life outcomes. The next stage was a full assessment of 27 full-text articles, but some were again excluded because they did not provide adequate empirical data, did not focus on the adolescent age group, or did not evaluate the impact of education on aspects of early adulthood transition. In the end, only 10 articles met all the criteria and were used as the basis for analysis in this study. This screening process followed the PRISMA flow, which includes the stages of identification, screening, eligibility, and included studies, so that all stages of selection were systematically documented (Page et al., 2021).

The inclusion criteria for this study include empirical articles (quantitative, qualitative, or mixed-methods) that examine adolescents aged 10–19 years (Sawyer et al., 2018) or emerging adults aged 18–24 years (Arnett, 2000), and focus on formal education at the secondary school or early college level. Articles should assess the relationship between education and psychosocial development, such as identity formation, emotional regulation, social relationships, or independence, and assess the impact of education on life outcomes such as career readiness, early adulthood competencies, or psychological well-being. Review articles, editorials, non-empirical reports, research on early childhood, studies focusing on teachers or parents, and research that does not provide measurements of adult outcomes are excluded from the analysis.

All articles that passed the selection stage were then extracted into a table that included the author and year of publication, country of research, sample characteristics, education level, education variables studied, psychosocial development indicators, life outcomes indicators, research design, and key findings relevant to the focus of the study. To ensure the quality of the articles, each study was assessed using JBI Critical Appraisal Tools according to their respective designs, taking into account the clarity of the research objectives, the validity of the instruments, the accuracy of the methods, the potential for bias, and the appropriateness of the analysis (Aromataris & Munn, 2020; Munn et al., 2019). Articles that showed low methodological quality or significant bias were not included in the final synthesis.

The extracted data were analyzed through narrative synthesis and thematic analysis (Braun & Clarke, 2006; Lucas et al., 2007). The analysis process was carried out in three stages, namely open coding to identify basic patterns related to education and adolescent development, followed by axial coding to group thematic categories such as identity, emotions, social relationships, and career readiness, and selective coding to integrate the findings into a more comprehensive thematic construction of the role of education in supporting adolescents' transition to adulthood (Corbin & Strauss, 1990). The synthesis of findings from various countries and social contexts provides a comprehensive picture of how education contributes to the psychosocial development and life outcomes of adolescents in early adulthood.

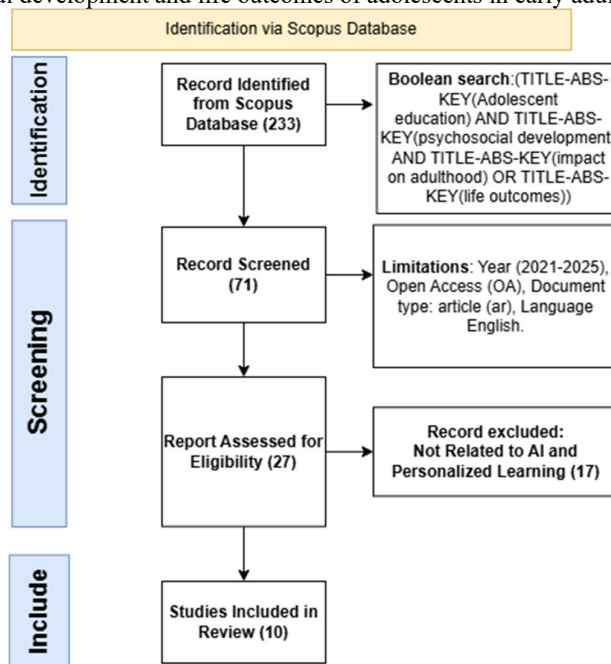


Figure 1. PRISMA Diagram

## Result

### Characteristics of Included Studies

Table 1. Main Information About

Title	Author	Year	Journal	Country	Author Affiliation
Parents' Educational Background and Child's Learned Skills Are More Predictive for a Positive School Career than Earlier Parenting Behavior or Child's Mental Health—Results from an 18-Year Longitudinal Observation Study	Beate Muschalla, Ann-Katrin Job, Wolfgang Schulz	2025	Children	Germany	Technische Universität Braunschweig, University of Kassel
Enabling participation in community-dwelling children and young people with acquired brain injuries and their families: a theory-based, evidence-based and person-centered approach to intervention development	Rachel Keetley, Joseph C Manning, Jade Kettlewell, Jane Williams, Emily Bennett,	2024	BMJ Open	UK	University of Nottingham, Nottingham, UK

Individual differences in the development of youth externalizing problems predict a broad range of adult psychosocial outcomes	Victoria Lyon, Kate Radford Allison E. Gornik, D. Angus Clark, C. Emily Durbin, Robert A. Zucker	2023	Development and Psychopathology	USA	Kennedy Krieger Institute, Johns Hopkins University, University of Michigan, Michigan State University
Post-intervention gendered impacts and moderating factors of a government cash plus intervention for adolescents in Tanzania	Jennifer Waidler, Leah Prencipe, Nyasha Tirivayi, Tumpe Mnyawami Lukongo, Paul Luchemba, Frank Eeataama, Jennifer Matafu, Tia Palermo	2025	SSM - Population Health	Tanzania	World Food Programme, Rome, Italy- Policy Research Solutions (PRESTO), Buffalo, NY, USA- UNICEF Innocenti – Office of Global Foresight and Research, Florence, Italy- Tanzania Social Action Fund, Dar es Salaam, Tanzania- UNICEF Tanzania, Dar es Salaam, Tanzania- Policy Research Solutions (PRESTO) and University at Buffalo, Buffalo, NY, USA
A journey to adolescent flourishing: Exploring psychosocial outcomes of outdoor adventure education	Judith Blaine, Jacqui Akhurst	2022	South African Journal of Education	South Africa	Department of Psychology, Faculty of Humanities, Rhodes University, Makhanda, South Africa
Individual, family, and environmental determinants of vision-related quality of life in children and young people with visual impairment	Ana Šemrov, Valerija Tadić, Mario Cortina-Borja, Jugnoo Sangeeta Rahi	2023	PLOS ONE	United Kingdom	Great Ormond Street Institute of Child Health, University College London, Uiverscroft Vision Research Group, University College London
Hypersexual behavior among young adults in Germany: characteristics and personality correlates	Dennis Jepsen, Petra J. Brzank	2022	BMC Psychiatry	Germany	Martin-Luther-University Halle-Wittenberg
A Longitudinal Mixed Methods Case Study Investigation of the Academic, Athletic, Psychosocial and Psychological Impacts of Being a Sport School Student Athlete	Ffion Thompson, Fieke Rongen, Ian Cowburn, Kevin Till, among others	2024	Sports Medicine	United Kingdom	King's College London, University of Greenwich, and others
In-person vs mobile app facilitated life skills education to improve the mental health of internally displaced persons in Nigeria	Ejemai Eboeime, Chisom Obi-Jeff, Rita Orji, Tunde	2024	BMC Health	Nigeria	Dalhousie University,

Integrating human-centered design into the development of an intervention to improve the mental wellbeing of young women in the perinatal period: the Catalyst project	M. Ojo, Ihoghosa Iyamu, and others	2021	Services Research	Mozambique	University College London, and others
	Tatiana Taylor Salisbury, Katie H Atmore, Inocencia Nhambongo, Muanacha Mintade, Luciana Massinga, Jak Spencer, Jonathan West, Flavio Mandlate		BMC Pregnancy and Childbirth		King's College London, Centro de Investigaçao em Saude de Manhiça, Ministry of Health, Helen Hamlyn Centre for Design, Universidade Eduardo Mondlane

Based on available data, it can be seen that research on child development, mental health, and social factors that affect adolescent well-being is increasingly becoming a focus of attention in the fields of psychology and education. Most of the publications recorded are from 2023 to 2025, indicating a growing global awareness of the importance of early intervention to support child and adolescent development. Topics discussed include the influence of parental educational background on children's school careers, interventions for children with brain injuries, and the impact of behavioral problems in adolescence on psychosocial outcomes in adulthood.

These studies show that factors such as parental education, family environment, and individual-based interventions have a significant influence on the psychosocial well-being of children and adolescents. For example, a study by Muschalla et al. (2025) emphasizes the importance of parental educational background in predicting children's educational success, while research by Keetley et al. (2024) focuses more on the role of theory- and evidence-based interventions in supporting the participation of children with brain injuries in their communities. This shows that family- and environment-based approaches are very important in supporting the development of children and adolescents.

The countries involved in this study demonstrate the diversity of approaches applied. Research from Germany (Muschalla et al., 2025) and the United Kingdom (Keetley et al., 2024) provides an overview of how social and educational interventions can be implemented to improve learning outcomes and mental health in children and adolescents. On the other hand, research conducted in Tanzania (Waidler et al., 2025) and Mozambique (Taylor Salisbury et al., 2021) raises the theme of socio-economic-based interventions and support for young women during the perinatal period, illustrating the importance of social factors in shaping an individual's psychological well-being.

The global trends emerging from this research indicate that more and more countries are focusing on holistic approaches that combine individual, family, and environmental factors in an effort to support the well-being of children and adolescents. Family-based approaches, technology-based interventions, and human-centered designs are now increasingly being used to create more personalized and relevant experiences for individual development. This study also reflects major changes in the fields of education and mental health, where the integration of social factors and community-based approaches play a key role in supporting the long-term success and well-being of children and adolescents.

Overall, these studies show that a combination of education, theory-based interventions, and social support from families and communities has great potential to support healthy psychosocial development in children and adolescents. Countries around the world, especially those involved in this research, continue to innovate in designing and implementing programs that can create more inclusive experiences and support individual well-being, which will ultimately contribute to improving the quality of life for future generations.

### ***Theme 1: Development and Impact Of Education On Adolescent Transition To Adulthood***

Education plays a central role in helping adolescents navigate the critical phase toward adulthood by equipping them with cognitive, social, emotional, and moral skills that form the foundation for psychosocial maturity. A study by Waidler et al. (2025) through the Ujana Salama program in Tanzania shows that education integrated with entrepreneurship and health support can accelerate adolescent independence, although its impact requires long-term structural support. Experience-based approaches such as Outdoor Adventure Education (Blaine & Akhurst, 2022) have also been shown to improve adolescents' resilience, social competence, and responsibility. In addition, family education has a significant influence on adolescents' psychological adjustment and academic motivation, with higher parental education levels correlating with better emotional well-being. Globally, a meta-analysis by Keetley et al. (2024) shows that school-based interventions combining social-emotional learning (SEL) and mindfulness significantly improve emotional well-being and reduce depressive symptoms in adolescents. Long-term findings from Gornik et al. (2023) also confirm that managing externalizing behavior and educational success in youth directly impact socioeconomic stability in adulthood. Overall, formal, non-formal, and family education serve as key catalysts in adolescents' transition to adulthood, with effectiveness dependent on sustained social and emotional support.

Education plays a central role in preparing adolescents for adulthood by covering cognitive, emotional, social, and psychological aspects, not only as a means of transferring knowledge but also as a vehicle for identity formation,

independence, and life skills. An inclusive educational environment has been shown to improve the quality of life and social independence of adolescents with visual impairments compared to special schools (Šemrov et al., 2023), while education for young women in Mozambique has demonstrated a transformative function in strengthening health literacy, emotional management, and dual role readiness through the Mama Feliz program (Taylor Salisbury et al., 2021). The lack of comprehensive sexuality education in Germany is associated with low psychosocial maturity and self-control in intimate relationships (Jepsen & Brzank, 2022), while life skills education for refugee youth in Nigeria increases psychological and social resilience in coping with trauma and post-conflict stress (Eboeime et al., 2024). Additionally, the dual-track education system in the UK has been shown to foster discipline, responsibility, and emotional maturity in student-athletes despite academic and competitive pressures (Thompson et al., 2024). Overall, these studies emphasize that adaptive, inclusive, and life-skills-oriented education is the primary catalyst in facilitating adolescents' transition toward independent, resilient, and responsible adulthood.

### ***Theme 2: The Influence of Formal Education on Psychosocial Development***

Formal education plays an important role in shaping adolescents' psychosocial development by enhancing self-identity, emotional well-being, and social and moral skills, as demonstrated by various studies that confirm its contribution to psychological resilience and social connection, although its effectiveness is influenced by context and quality of implementation. Waidler et al. (2025) found that formal education and mentoring activities in Tanzania strengthened self-identity and concepts of gender equality and reduced symptoms of depression, although their impact weakened after the COVID-19 pandemic, confirming that education increases self-efficacy but does not fully protect against macro social instability. Research by Blaine and Akhurst (2022) shows that Outdoor Adventure Education in South Africa promotes psychosocial development in ten domains of F.L.O.U.R.I.S.H.I.N.G through collaboration and self-reflection, although the benefits may be reduced if facilitation is not inclusive. Keetley et al.'s meta-analysis (2024) of 108 studies involving more than 120,000 adolescents shows that school-based programs increase social connectedness, empathy, and resilience with moderate effects (Hedges'  $g \approx 0.32$ ), where universal interventions provide broad benefits and targeted programs are more effective for at-risk groups. The longitudinal study by Gornik et al. (2023) also confirms that consistent engagement in formal education is associated with emotional stability and social competence into adulthood, while experiences of rejection or early school dropout increase the risk of externalizing behavior. Overall, empirical evidence shows that formal education is an essential context for the formation of identity, empathy, social connectedness, and emotional resilience in adolescents. However, its effectiveness is greatly influenced by the quality of interpersonal relationships, social support, and environmental stability. Therefore, inclusive, reflective, and holistic well-being-oriented education is most effective in supporting healthy psychosocial development.

Formal education has been shown to have a significant influence on the psychosocial development of adolescents, both directly and through interactions with the environment, family, and individual factors, as demonstrated by the five studies analyzed. Šemrov et al. (Šemrov et al., 2023) emphasizes that formal education, along with parental educational background and socioeconomic status, is an important determinant of psychosocial adjustment in adolescents with visual impairments, where parental education is positively correlated with VQoL ( $r = 0.20$ ) and improves emotional regulation, adaptive coping, and self-esteem. Salisbury et al. (2021) showed that formal and non-formal education strengthens the psychosocial well-being of adolescent girls through increased self-confidence, empathy, and emotional resilience in participatory activities. Jepsen and Brzank (2022), found that a lack of formal education, particularly sex and emotional education, is associated with the emergence of hypersexual behavior in young adults through the mediators of impulsivity, loneliness, and low emotional regulation, thus highlighting the role of education in preventing maladaptive behavior. The study by Eboeime et al. (2024) shows that formal and non-formal education through LSE programs for refugee adolescents can build psychosocial resilience, emotional regulation, and social connectedness through participatory learning. Meanwhile, Thompson et al. (2024) show that formal education integrated with extracurricular activities encourages the development of discipline, self-confidence, and interpersonal skills in student-athletes, although there are gender differences in stress levels and self-confidence. Overall, formal education serves as a pillar of adolescent psychosocial development by shaping identity, self-esteem, emotional regulation, and mental and social resilience, the effectiveness of which is influenced by family support, environment, and inclusive and participatory learning approaches.

### ***Theme 3: Education and Decision-Making Skills***

Education—including formal education, school interventions, experiential learning, and an educated family environment—has consistently been shown to play a central role in shaping adolescents' decision-making abilities as they transition into adulthood, as demonstrated by the five articles reviewed. Evidence from a cluster randomized controlled trial in Tanzania shows that education-based training can improve future orientation, with 65% of participants successfully formulating business or education plans post-intervention, although it did not result in long-term changes in sexual decisions due to the influence of social and cultural norms (Waidler et al., 2025). Experience-based education, such as outdoor adventure education, also strengthens autonomy, leadership, emotional regulation, and self-reflection through journaling, which promotes maturity in judgment (Blaine & Akhurst, 2022). Psychologically-based school interventions, including cognitive-

behavioral training and peer-guided discussions, also enhance emotional regulation, social judgment, and planning as key competencies toward maturity (Keetley et al., 2024). In the long term, educational attainment during adolescence is a strong predictor of the quality of adult decisions—including financial management, coping strategies, and civic engagement—as evidenced by the Dunedin longitudinal study, while school failure correlates with impulsive decisions and job instability (Gornik et al., 2023). Overall, education serves as a catalyst that develops the cognitive, emotional, social, and prosocial capacities necessary for mature, future-oriented adult decision-making, underscoring its urgency as the foundation for the development of sustainable decision-making competencies.

Education—whether formal, nonformal, or community-based—is a central factor in shaping decision-making skills for adulthood, as demonstrated by five studies examining adolescents with visual impairments, young mothers in the perinatal period, young adults with risky behaviors, internally displaced persons, and student-athletes in dual-career programs. Among adolescents with visual impairments (CYP-VI), educational engagement and school participation were found to increase autonomy, independence, and social responsibility, along with environmental support and access to resources (Šemrov et al., 2023). For young mothers, the Mama Feliz intervention—through health education, mentoring, and self-reflection—restores agency and improves decision-making skills related to health, parenting, and finances, especially among participants who return to school or attend skills training (Taylor Salisbury et al., 2021). In contrast, young adults with hypersexual behavior demonstrate that a lack of reflective sexuality education from an early age is associated with weak impulse control, moral reasoning, and the ability to weigh consequences, while comprehensive sexuality education promotes self-regulation and social responsibility (Jepsen & Brzank, 2022). Among Nigerian internally displaced persons, the RESETTLE-IDPs life skills program strengthens cognitive-affective capacities in decision-making through training in stress management, empathy, goal setting, and problem solving, including through a WhatsApp-based digital version that increases learning flexibility (Eboreime et al., 2024). As for student-athletes in dual-career programs, education shapes self-discipline, resilience, and the ability to balance academic and athletic priorities, although high pressure can affect the quality of decisions, requiring adequate support (Thompson et al., 2024). Overall, the five studies confirm that education is not merely a means of knowledge transfer, but a medium for strengthening reflective capacity, self-efficacy, and social responsibility that enables individuals to understand themselves, weigh consequences, and manage internal and external pressures, thereby becoming determinants of psychosocial maturity in adolescents and young adults.

#### **Theme 4: Moderator and Mediator Factors**

The relationship between education and the transition to adulthood is not linear, but is influenced by various moderating and mediating factors at the individual, family, community, and institutional levels. Findings by Waidler et al. (2025) show that gender norms, institutional access, and economic conditions moderate the effectiveness of educational and social protection interventions, while the COVID-19 pandemic and delays in cash transfers mediate mental health and livelihood stability. In experiential education, Blaine and Akhurst (2022) emphasize that cultural values, group cohesion, and leadership quality moderate psychosocial outcomes, while facilitator relational sensitivity mediates participant engagement. In the school context, Keetley et al. (2024) highlight that gender, intervention duration, and implementation fidelity moderate the effectiveness of mental health programs, while socioeconomic factors and cultural acceptance mediate outcome variation. The longitudinal findings of Gornik et al. (2023) add that socioeconomic vulnerability moderates the influence of adolescent externalizing behavior on adult outcomes, while parenting quality and family structure mediate psychosocial success, and gender differences also moderate developmental trajectories. Overall, education is influenced by the complex interaction of structural, sociocultural, family, and individual factors that determine the extent to which education can bring about psychosocial change, mental health, and readiness for adulthood. Therefore, educational interventions must be designed to be contextual, culturally and gender sensitive, and supported by families and institutions in order to produce optimal developmental outcomes.

Education as a transitional pathway to adulthood in the five studies analyzed is influenced by complex interactions between individual, family, socioeconomic, cultural-gender, and institutional factors, which function as moderators and mediators of adolescent and young adult development. At the individual level, Šemrov et al. (2023) show that functional vision is the strongest moderator of VQoL ( $r = -0.52$ ), while comorbidity lowers the score by about 3.9 points; Jepsen and Brzank (2022) found that impulsivity, narcissism, and histrionic tendencies ( $\phi = 0.28-0.40$ ), as well as gender differences (OR = 3.50), moderate hypersexual behavior; and Thompson et al. (2024) showed that women experience higher stress and that external sports commitments worsen the recovery of student-athletes. In the family domain, parental and in-law support increases young mothers' educational motivation in Mozambique (Taylor Salisbury et al., 2021), while dysfunctional parenting increases the risk of hypersexual behavior (Jepsen & Brzank, 2022), and academic flexibility and mentoring mediate academic-training stress in student-athletes (Thompson et al., 2024). Socioeconomically, SES and parental education mediate children with visual impairments' access to inclusive education services (Šemrov et al., 2023), income instability limits young women's education (Taylor Salisbury et al., 2021), and dependence on humanitarian aid reduces internally displaced persons' focus on life skills education (Eboreime et al., 2024). Patriarchal norms, social stigma, and gender expectations limit women's participation in education and interventions (Eboreime et al., 2024; Taylor Salisbury et al., 2021), in line with gender moderation in adult behavior (Jepsen & Brzank, 2022) and differences in stress among student-athletes (Thompson et al., 2024). At the institutional level, school type moderates VQoL, with inclusive schools

having a more positive impact ( $d = 0.44$ ) (Šemrov et al., 2023), while facilitator-based interventions and local languages enhance program participants' understanding of RESETTLE-IDPs (Eboreime et al., 2024), and institutional coordination, schedule integration, and holistic support mediate student-athletes' success (Thompson et al., 2024). Overall, all studies confirm that the effectiveness of education in supporting the transition to adulthood is highly determined by multilevel dynamics that can strengthen or weaken psychosocial development, mental well-being, and readiness for adulthood, making comprehensive analysis of moderators and mediators crucial in designing effective educational interventions.

## **Discussion**

### ***Interpretation of Findings***

The results of this systematic review confirm that education functions not only as a cognitive arena, but also as a complex ecosystem for psychosocial, moral, and identity development. Education acts as a "transitional agent" that connects the world of adolescents, who are still bound by dependence, with the adult world, which demands autonomy and responsibility. In this context, the findings of Waidler et al. (2025), Blaine and Akhurst (2022), and Keetley et al. (2024) show that the effectiveness of education does not only depend on the curriculum or methods, but on the dynamic interaction between social support, institutional structures, and cultural sensitivity. Education that is oriented towards experience, self-reflection, and social empowerment has proven to be most effective in fostering self-efficacy, empathy, and emotional resilience, which are the foundations of psychosocial maturity.

Formal and nonformal education also serve as a platform for developing agency and self-control, where collaborative and reflection-oriented learning processes strengthen mature decision-making capacities (Gornik et al., 2023). However, its effectiveness is not universal: studies show that social norms, gender, and SES are often significant barriers (Jepsen & Brzank, 2022; Šemrov et al., 2023; Taylor Salisbury et al., 2021). This reinforces the view that education is not a neutral system, but rather an arena for negotiating power and identity, where inclusivity is an essential condition for social transformation.

In addition, education has been proven to play a restorative and therapeutic role. For vulnerable groups such as internally displaced persons (Eboreime et al., 2024) or adolescents with visual impairments (Šemrov et al., 2023), education is not merely a transfer of knowledge, but a process of restoring dignity and self-meaning after a crisis. This opens up a new dimension that humanistic education can function as a mental and social health intervention, not just an economic or academic instrument.

### ***Comparison with Previous Reviews***

Unlike previous reviews that focused on academic attainment or school-to-work transition, this SLR shows that education has a broader transformative dimension—namely, building existential and emotional readiness for adulthood. Previously, most studies (e.g., in OECD and UNICEF literature) emphasized work competencies and 21st-century skills, while the results of this study highlight the importance of emotional literacy, moral agency, and psychosocial resilience as predictors of long-term well-being.

This finding also broadens the paradigm of life skills education to be more integrative. While classical reviews place life skills education as an additional program, the results of research by Blaine and Akhurst (2022), as well as Keetley et al. (2024), show that reflection-based and mindfulness learning are actually at the core of adolescent transition development. This approach goes beyond the boundaries of conventional "values education" by forming neurocognitive pathways that enhance emotional regulation and social empathy.

In addition, compared to previous meta-analyses that focused solely on academic effects, this SLR identifies the role of education in fostering reflective abilities and moral capacity as forms of adult maturity. For example, in the study by Jepsen and Brzank (2022), the absence of early sex education was found to reduce impulse control and moral judgment, indicating that moral and emotional education is the foundation for ethical decision-making in adulthood. Thus, these findings expand the epistemic scope of education from "learning to know" to "learning to become".

### ***Implications for Policy and Practice***

The practical implications of these findings are far-reaching. First, education policy needs to shift from a cognitive paradigm to a transformative paradigm. Curricula that emphasize academic outcomes need to be replaced or supplemented with designs that foster emotional regulation, empathy, and social responsibility. SEL programs, outdoor experiential learning, and community-based education should be treated not as add-ons, but as core components of the education system (Blaine & Akhurst, 2022; Keetley et al., 2024).

Second, education must be contextualized in a culturally and gender-sensitive manner. As shown by Waidler et al. (2025) and Salisbury et al. (2021), the success of interventions depends heavily on social acceptance and local norms. Thus,

the design of education policies needs to involve communities, families, and local leaders in order to reflect socially relevant values without sacrificing the principle of equality.

Third, education must be positioned as a strategy for social recovery. In the context of post-conflict, poverty, and mental health crises, education has the potential to serve as a means of reconstruction of agency and psychosocial healing. Programs such as RESETTLE-IDPs (Eboime et al., 2024) and Mama Feliz (Taylor Salisbury et al., 2021) prove that education can function as a space for social therapy that rebuilds individuals' sense of control and hope for life.

Fourth, educational interventions must be ecosystemic and cross-sectoral. Effective education requires collaboration with the health, social work, and economic development sectors. For example, the Ujana Salama intervention in Tanzania (Waidler et al., 2025) shows that education combined with entrepreneurship and health support has a stronger long-term effect on young adult independence.

### **Limitations**

This SLR has several limitations that need to be considered. First, the wide variety of study designs and contexts led to high heterogeneity of findings, so generalizations should be made with caution. Second, most studies focused on middle- and low-income countries, so the results may not fully represent education systems in developed countries. Third, most studies use short-term outcome measures (6–12 months), so the long-term effects on adult maturity still require further longitudinal research (Gornik et al., 2023). Finally, publication bias may occur because studies showing negative or neutral results tend not to be published.

However, despite these limitations, these findings make an important theoretical and practical contribution: that education is a space for the formation of human identity, emotions, and morality, not merely a means of economic achievement. Effective education must facilitate the human journey to become, not merely to know.

### **Conclusion**

The results of this systematic literature review show that education plays a fundamental and multidimensional role in facilitating adolescents' transition to adulthood. In response to the first problem statement, education has been shown to not only improve cognitive capacity, but also serve as an arena for identity formation, emotional resilience, social relationships, and readiness to face the demands of adulthood. Regarding the second problem formulation, formal education—both through secondary school and early higher education—consistently contributes to adolescents' psychosocial development through strengthening emotional regulation, identity formation, empathy, and independence, although its effectiveness depends on the quality of the learning environment and social support. On the third issue, cross-study findings show that education also plays an important role in improving adolescents' decision-making abilities, including in career determination, life goal setting, and risk assessment, through the strengthening of agency, self-control, and critical reflection. In response to the fourth problem formulation, the relationship between education and successful transition to adulthood is influenced by various moderating and mediating factors, such as socioeconomic status, family support, cultural and gender norms, mental health conditions, and an inclusive school climate. Overall, this research synthesis confirms that education functions as a comprehensive psychosocial development mechanism and not merely an academic instrument. Therefore, efforts to strengthen the education system need to be carried out holistically, ecologically, and with sensitivity to the socio-cultural context in order to maximize adolescents' readiness to enter adulthood.

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