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# A Literature Review of Research Trends on Adolescents' Psychological Capital (2016–2025)

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## ABSTRACT

This study examined articles published in Taiwanese journals, focusing on adolescent psychological capital as the central dimension of inquiry, in order to explore recent research trends in the domestic context. Employing literature review of journal articles published between 2016 and 2025, three indicators—research themes, methodological approaches, and research orientations—were analyzed. The findings indicate: (1) Research themes primarily revolve around positive psychology and resilience, with a noticeable concentration; however, issues related to well-being, cultural contexts, and other micro-level dimensions warrant further expansion. (2) Research participants are predominantly university students and adolescents, with relatively limited focus on children and adults; future work would benefit from longitudinal, cross-age investigations. (3) Methodologically, quantitative approaches remain dominant, yet the application of qualitative and mixed-methods designs has been gradually increasing; thus, greater encouragement of methodological pluralism and cross-contextual validation is recommended. Future research can enrich empirical foundations and localized practices by diversifying themes, integrating methodological paradigms, and broadening participant groups.

**Keywords:** Adolescents, Psychological Capital, Literature Review, Positive Psychology, Resilience

## INTRODUCTION

In rapidly changing social environments, adolescents are confronted with multiple challenges arising from academic demands, interpersonal relationships, and family transitions, making issues of mental health and psychological adjustment increasingly salient. In particular, in the aftermath of the COVID-19 pandemic, dramatic shifts in social contexts have intensified adolescents' pressures in both learning and daily life (Chen & Bonanno, 2020). Within the fields of education and counseling, how to support adolescents in developing the capacity to cope with adversity has thus become an urgent concern.

In response to these challenges, the concept of Psychological Capital (PsyCap) proposed by Luthans and colleagues (2007) has been identified as a critical psychological resource supporting the development of children and adolescents. Psychological capital comprises four core components: self-efficacy, referring to individuals' confidence in their ability to successfully perform tasks and achieve goals; hope, denoting the capacity to set meaningful goals and generate multiple pathways to attain them; optimism, reflecting a positive outlook toward the future and the belief that difficulties are surmountable; and resilience, which involves the ability to adapt, recover, and grow in the face of adversity. This framework of positive psychological capital has attracted growing attention from both academic researchers and practitioners.

Psychological capital is conceptualized as a set of psychological resources that are developable and expandable, enabling individuals to confront challenges and pursue positive development (Luthans et al., 2007). Empirical studies have further indicated that adolescents with higher levels of positive psychological capital—particularly resilience—not only recover from adversity but also experience growth through challenging experiences (Masten, 2014; Sun & Shek, 2013).

Although research on psychological capital has gradually accumulated, there remains a notable gap in the integrated examination of psychological capital during adolescence, especially with regard to its application in educational practice and the development of culturally grounded conceptualizations. Moreover, existing studies tend to focus on isolated dimensions of psychological capital, resulting in a lack of systematic synthesis and comparative analysis. To address these gaps, the present study employs a literature review to review and analyze Taiwanese research published from 2016 to the present, with the aim of identifying research trends in adolescent psychological capital and proposing directions for future research.

## THEORETICAL FOUNDATIONS OF PSYCHOLOGICAL CAPITAL

Luthans and colleagues (2007) proposed that psychological capital theory emphasizes the positive psychological



The second most frequent theme was positive psychology (13 occurrences), reflecting the strong theoretical influence of positive psychology on Taiwanese research concerning adolescent psychological capital. Consistent with the characteristics of positive psychology described by Lopez et al. (2018), these studies move beyond a sole focus on psychological distress and instead emphasize the cultivation of positive attributes such as optimism, confidence, hope, and resilience—traits that closely align with the core components of psychological capital.

The third most frequent keyword was resilience (13 occurrences), underscoring individuals' capacity to cope with adversity as a focal concern in psychological capital research. Resilience constitutes one of the four core components of psychological capital and is therefore frequently included as either an integrated dimension or an independently examined construct. Yang (2023) further noted conceptual overlap between resilience and the *resilience* dimension of psychological capital. In addition to resilience, Figure 1 also reveals the presence of self-efficacy and optimism, with hope appearing less prominently, suggesting differential emphases among scholars regarding the four dimensions of psychological capital.

The fourth most frequent theme was depression (11 occurrences). Luthans et al. (2007) conceptualized psychological capital as a protective factor against negative emotional states, and depression is closely linked to overall mental health. Adolescents, who are navigating critical stages of emotional and identity development while facing academic pressure, peer relationships, and family transitions, constitute a high-risk group for depressive symptoms. Consequently, a substantial body of research has examined the role of psychological capital in mitigating depression, highlighting its potential value in adolescent counseling and preventive educational interventions.

Additional frequently occurring keywords included mental health, stress, interpersonal relationships, family cohesion, economically disadvantaged, gender, social support, and teacher support, indicating that researchers often adopt a social-ecological or support-system perspective and attend to contextual and cultural diversity.

Overall, the distribution of major keywords suggests that research on adolescent psychological capital has shifted beyond a purely clinical or pathology-oriented approach toward a stronger emphasis on positive psychological attributes and resilience. This trend closely corresponds to the four core dimensions of psychological capital proposed by Luthans et al. (2007)—self-efficacy, hope, optimism, and resilience—indicating substantial alignment between Taiwanese research designs and international theoretical

frameworks. While existing studies predominantly examine well-being and resilience as outcome variables, future research could further explore associations with academic performance, interpersonal functioning, and family dynamics to strengthen the integration of theory and practice. A summary of research trends in adolescent psychological capital is presented in Table 1.

## SYNTHESIS OF RESEARCH CHARACTERISTICS AND CODING SCHEME

The present study employed literature review to examine journal articles published between 2016 and 2025. According to Chang et al. (2020), literature review enables researchers to conduct a structured synthesis and integrative analysis of studies within a specific research domain. This method extends beyond simple data collection by systematically classifying and organizing research materials, allowing for comprehensive and in-depth examination within a defined scope, and thereby providing valuable insights into research trends.

A total of 118 journal articles related to psychological capital and adolescents were retrieved from the Airiti Library and included in the literature review. The researcher first examined the language of publication (Chinese, English, or other languages). Drawing on the analytical framework proposed by Cheng et al. (2021), three primary analytical indicators were adopted to identify research trends: research participants, research methods, and research themes. For the coding process, EndNote was used to organize and group the literature, with Microsoft Excel serving as a supplementary tool for coding management and data aggregation. Coding categories were initially developed based on the preliminary analysis presented in Chapter III and were subsequently refined through iterative comparison between emerging findings and initial classifications. This dynamic coding process allowed for the addition and adjustment of categories as needed. The finalized coding scheme is presented in Table 2.

The coding categories for research participants included children, adolescents, college students, adults, and documentary data. Research methods were categorized

**Table 1:** Summary of Research Trends in Adolescent Psychological Capital

Research Dimension	Key Findings
Major thematic trends	Well-being, positive psychology, resilience, depression
Theoretical foundations	Positive psychology, resilience, self-efficacy
Participant age groups	Adolescents, college students
Contexts of application	Education, psychological counseling, support for disadvantaged populations, multicultural contexts

**Table 2:** Coding Categories for the Literature review of Adolescent Psychological Capital Research

Research Participants	Research Methods	Research Themes
1. Children	1. Content analysis	1. Resilience
2. Adolescents	2. Qualitative research	2. Positive psychology
3. College students	3. Quantitative research	3. Well-being
4. Adults	4. Action research	4. Depression, anxiety, and stress
5. Documentary data	5. Mixed-methods research	5. Self-efficacy
	6. Other	6. Counseling and guidance
		7. Teaching and instruction
		8. Sport psychology
		9. Sociocultural issues

as literature review, qualitative research, quantitative research, action research, mixed-methods research, and other methodologies. Research themes were classified into resilience, positive psychology, well-being, depression/anxiety/stress, self-efficacy, counseling and guidance, teaching and instruction, sport psychology, and sociocultural issues.

Based on the coding framework outlined in Table 2, the content of all 118 articles was systematically analyzed. Each article was categorized according to its research participants, primary research method, and focal research theme. The frequency of studies within each of the three major dimensions was then calculated to identify dominant patterns and trends in adolescent psychological capital research.

## RESULTS

### Publication Overview and Thematic Trends in Adolescent Psychological Capital Research

To examine the publication characteristics of domestic research on adolescent psychological capital, the 118 journal articles were first analyzed by year of publication and language of publication. Through cross-verification using database records and manual inspection, the results indicated that all 118 articles (100%) published between 2016 and 2025 were written in Traditional Chinese, while no articles (0%) were published in English or other languages. Although English keywords or abstracts were occasionally provided, the full texts were predominantly written in Traditional Chinese. This finding reflects the current linguistic pattern of psychological capital research in Taiwan. The annual distribution of publications is presented in Table 3. As shown in Table 3, the number of publications on adolescent psychological capital exhibited

**Table 3:** Annual Distribution of Publications on Adolescent Psychological Capital (2016–2025)

Year	Number of Articles	Percentage
2016	5	4.2
2017	12	10.2
2018	7	5.9
2019	11	9.3
2020	16	13.6
2021	16	13.6
2022	22	18.6
2023	13	11.0
2024	12	10.2
2025	4	3.4
Total	118	100.0

an overall trend of gradual increase followed by a slight decline across the ten-year period. Publication output was relatively limited in the early years, beginning with six articles in 2016 (4.2%). The number of publications reached an initial peak in 2020 and 2021 (16 articles each; 13.6%), and attained its highest point in 2022 with 22 articles (18.6%), indicating heightened scholarly attention during that period. A modest decline was observed in 2023 and 2024 (13 articles [11.0%] and 12 articles [10.2%], respectively). As of 2025, only four articles (3.4%) were identified, which may be attributable to the incomplete publication year or delayed database indexing. Overall, these findings suggest that adolescent psychological capital has received considerable attention in recent years, although whether this interest is diminishing remains inconclusive and warrants further observation.

### Thematic Distribution of Adolescent Psychological Capital Research

The thematic distribution of the reviewed studies is presented in Table 4. Because psychological capital served as the primary inclusion criterion for the literature search, it was excluded from thematic categorization. Given that individual studies may address multiple themes, classification was determined through a combination of title analysis, abstract review, frequency of thematic references in the text, and the qualitative emphasis placed on specific constructs. Based on these criteria, each study was assigned to its most salient thematic category.

The analysis of 118 articles revealed that positive psychology constituted the most prevalent research theme (44 articles; 37.3%), followed by resilience (24 articles; 20.3%). These findings indicate that Taiwanese scholars predominantly situate psychological capital within a positive psychology framework and emphasize its protective role in enhancing adolescents' psychological adaptability and capacity to cope with adversity. Psychological capital was also frequently examined in

relation to depression, anxiety, and stress (9 articles; 7.6%), as well as applied in counseling and guidance (9 articles; 7.6%), educational settings (8 articles; 6.8%), and sport psychology (7 articles; 5.9%), suggesting a gradual expansion into diverse applied contexts. In addition, sociocultural perspectives were addressed in six articles (5.1%), reflecting emerging attention to broader contextual influences.

In contrast, studies focusing specifically on self-efficacy as an isolated dimension of psychological capital were relatively limited (5 articles; 4.2%), and no studies exclusively examined the dimensions of optimism or hope. This pattern suggests that, apart from resilience, the more fine-grained components of psychological capital remain underexplored in the Taiwanese context. Notably, although well-being appeared frequently in the preliminary keyword analysis, only six studies (5.1%) identified it as a primary research theme. This discrepancy suggests that well-being is often referenced as an ultimate outcome rather than as a central research focus or mediating variable.

Overall, psychological capital has increasingly been recognized as a key psychological resource for adolescents' positive development across multiple disciplines. Future research may further strengthen theoretical and practical contributions by expanding investigations into cross-contextual applications and culturally embedded frameworks, thereby enhancing relevance to real-world educational and counseling settings.

### Temporal Trends in Research Themes

Figure 2 illustrates the annual trends in research themes related to adolescent psychological capital from 2016 to 2025. Overall, positive psychology consistently remained the dominant theme and reached its peak during 2022–2023 (15 articles), reflecting heightened societal and academic attention to adolescents' positive psychological development in the post-pandemic period. Resilience also appeared as a stable and recurring theme across the years, underscoring its central role within the psychological capital construct. Themes such as well-being, educational applications, and depression, anxiety, and stress gained increased attention after 2020. Although these shifts temporally coincide with the outbreak of COVID-19 in Taiwan and a growing focus on emotional distress, the reviewed studies did not explicitly attribute these trends to the pandemic. Consequently, any association between contextual changes and thematic emphasis remains speculative. Other themes, including self-efficacy, sociocultural perspectives, and sport psychology, were less frequently addressed, indicating substantial opportunities for future research in diversified contexts and interdisciplinary applications.

### Research Participants: Distribution and Trends

Table 5 summarizes the distribution of research participants across the 118 journal articles on adolescent psychological capital. The results indicate that college students constituted the most frequently studied population (36 articles; 30.5%), followed by adolescents (27 articles; 22.9%). These findings suggest that research on psychological capital has primarily focused on populations spanning secondary education to tertiary education.

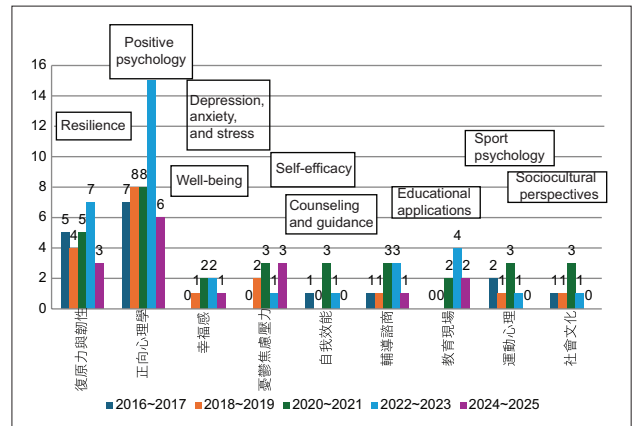


Figure 2: Annual Trends in Research Themes on Adolescent Psychological Capital

Table 4: Thematic Distribution of Research on Adolescent Psychological Capital

Theme	Number of Articles	Percentage
Resilience	24	20.3
Positive psychology	44	37.3
Well-being	6	5.1
Depression, anxiety, and stress	9	7.6
Self-efficacy	5	4.2
Counseling and guidance	9	7.6
Educational applications	8	6.8
Sport psychology	7	5.9
Sociocultural perspectives	6	5.1
Total	118	99.9

Note. Percentages were rounded to one decimal place; totals may not equal 100% due to rounding.

Table 5: Distribution of Research Participants in Adolescent Psychological Capital Studies

Participant Group	Number of Articles	Percentage
Children	5	4.2
Adolescents	27	22.9
College students	36	30.5
Adults	24	20.3
Documentary data	26	22.0
Total	118	99.9

Note. Percentages were rounded to one decimal place; totals may not equal 100% due to rounding.

Studies targeting adults (24 articles; 20.3%) and those based on documentary data (26 articles; 22.0%) each accounted for approximately one-fifth of the reviewed literature, reflecting a gradual extension of psychological capital research into adult education, workplace contexts, and conceptual or theoretical investigations. In contrast, studies focusing on children were relatively scarce (5 articles; 4.2%), indicating that measurement instruments and theoretical models of psychological capital for younger populations remain underdeveloped and warrant further validation. Overall, the observed distribution of research participants provides useful reference points for future studies seeking to expand psychological capital research across developmental stages and applied contexts.

Figure 3 illustrates changes in research participant groups across studies published between 2016 and 2025. Overall, college students consistently represented the most frequently studied population from 2016 onward, with the number of studies reaching 20 articles during the period from 2020 to 2023, reflecting sustained scholarly interest in adolescents' and emerging adults' psychological resources and adaptive strategies.

Research focusing on adults demonstrated a noticeable growth trend, peaking in 2022 with 11 articles, suggesting that psychological capital has increasingly been applied to adult populations and workplace-related psychological development. In contrast, studies involving children remained limited across all years, appearing only sporadically in individual publication periods. This pattern may be attributable to the relative immaturity of measurement tools and conceptual frameworks for assessing psychological capital in childhood, indicating an important direction for future research. Studies based on documentary data maintained a relatively stable proportion throughout the observed period, underscoring the continued importance of theoretical integration and systematic reviews within this field.

### Research Methods: Distribution and Trends

Table 6 presents the distribution of research methodologies across the 118 journal articles on adolescent psychological capital. Overall, quantitative research constituted the dominant methodological approach, accounting for nearly 70% of the studies (81 articles; 68.6%). Among these, scale-based studies were the most prevalent (38 articles; 32.2%), followed by questionnaire surveys (30 articles; 25.4%). This pattern indicates that domestic research in this area has largely emphasized structured measurement instruments and statistical analyses, reflecting a strong orientation toward empirical and hypothesis-testing research designs.

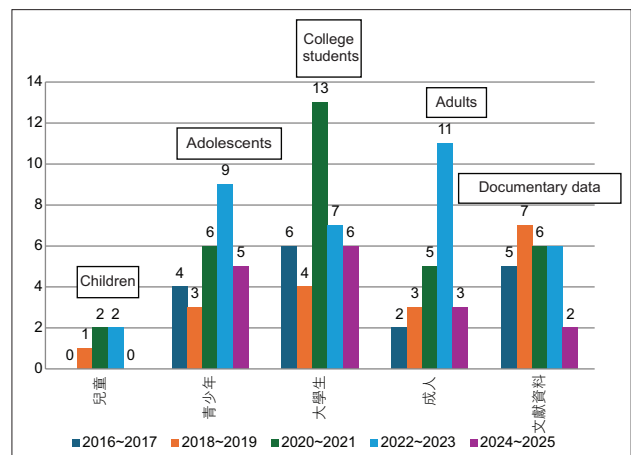


Figure 3: Annual Trends in Research Participants in Adolescent Psychological Capital Studies

Table 6: Distribution of Research Methods in Adolescent Psychological Capital Studies

Research Method	Number of Articles	Percentage
Literature review	25	21.2
Qualitative – case studies	9	7.6
Qualitative – interviews	3	2.5
Quantitative – questionnaires	30	25.4
Quantitative – scales	38	32.2
Quantitative – data analysis	7	5.9
Quantitative – database analysis	6	5.1
Total	118	99.9

Note. Percentages were rounded to one decimal place; totals may not equal 100% due to rounding

In addition, literature review studies comprised 25 articles (21.2%), underscoring the continuing importance of theoretical synthesis and conceptual development in psychological capital research. In contrast, qualitative interview-based studies were relatively rare (3 articles; 2.5%), suggesting that adolescents' subjective experiences and culturally situated meanings of psychological capital remain underexplored. Case-based qualitative studies (9 articles; 7.6%) and other data-analytic quantitative approaches (13 articles combined; 11.0%) accounted for smaller proportions, indicating potential opportunities to strengthen practice-oriented and in-depth narrative research in future investigations.

### Temporal Trends in Research Methods

Figure 4 illustrates the annual trends in research methods used in studies on adolescent psychological capital from 2016 to 2025. Literature reviews consistently appeared across the examined years, indicating their foundational and sustained role in this field. Quantitative approaches emerged as the predominant methodological orientation, with scale-based and questionnaire-based studies being the most frequently employed methods.

**Table 7:** Cross-Analysis of Research Themes, Participants, and Methods in Adolescent Psychological Capital Studies

	Children	Adolescents	College Students	Adults	Documentary Data	Total
Resilience	Literature review	0	0	0	0	3
	Qualitative methods	0	2	2	1	0
	Quantitative methods	0	8	6	2	0
	Total	0	10	8	3	3
Positive psychology	Literature review	0	0	0	0	10
	Qualitative methods	0	1	0	1	0
	Quantitative methods	3	6	13	10	0
	Total	3	8	13	11	9
Well-being	Literature review	0	0	0	0	1
	Qualitative methods	0	0	0	0	0
	Quantitative methods	0	2	1	2	0
	Total	0	2	1	2	1
Depression, anxiety, and stress	Literature review	0	0	0	0	1
	Qualitative methods	0	0	0	0	0
	Quantitative methods	0	3	2	3	0
	Total	0	3	2	3	1
Self-efficacy	Literature review	0	0	0	0	0
	Qualitative methods	0	0	0	0	0
	Quantitative methods	1	0	4	0	0
	Total	1	0	4	0	0
Counseling and guidance	Literature review	0	0	0	0	5
	Qualitative methods	0	1	0	0	0
	Quantitative methods	1	0	1	1	0
	Total	1	1	1	1	5
Educational applications	Literature review	0	0	0	0	1
	Qualitative methods	0	0	1	2	0
	Quantitative methods	0	2	0	2	0
	Total	0	2	1	4	1
Sport psychology	Literature review	0	0	0	0	2
	Qualitative methods	0	0	0	0	0
	Quantitative methods	0	1	4	0	0
	Total	0	1	4	0	2
Sociocultural perspectives	Literature review	0	0	0	0	2
	Qualitative methods	0	0	1	0	0
	Quantitative methods	0	2	1	0	0
	Total	0	2	2	0	2

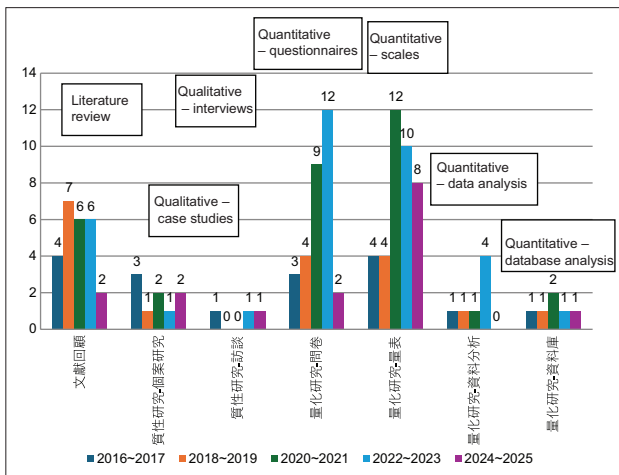
Notably, the use of structured quantitative instruments increased markedly after 2020. Between 2020 and 2023, a total of 22 studies employed either scales or questionnaires, accounting for 32.8% of all studies published during this four-year period (67 articles in total). This trend suggests a growing emphasis on empirical validation and large-scale data analysis in psychological capital research.

In contrast, qualitative studies accounted for only 12 articles (10.1%) over the ten-year period, indicating that qualitative inquiry remains a relatively underutilized approach in this research domain. Overall, these patterns

suggest a methodological shift from theoretical integration toward empirical verification and applied research, while also highlighting qualitative research as a potentially valuable yet underdeveloped avenue for future studies.

#### Cross-Analysis of Research Themes, Participants, and Methods

To examine the interrelationships among research themes, research participants, and research methods, the methodological categories were consolidated into four types: literature review, action research, qualitative research, and quantitative research. These categories were



**Figure 4:** Annual Trends in Research Methods in Adolescent Psychological Capital Studies

then cross-analyzed with participant groups (children, adolescents, college students, adults, and documentary data) and research themes (resilience, positive psychology, well-being, depression/anxiety/stress, self-efficacy, counseling and guidance, educational applications, sport psychology, and sociocultural perspectives). The results of this cross-analysis are presented in Table 7.

As shown in Table 7, the most frequently observed combination was positive psychology × college students × quantitative research (13 articles), indicating that scholars predominantly employ quantitative approaches to investigate psychological capital among campus-based populations. The second most common combination was resilience × adolescents × quantitative research (10 articles), reflecting strong research interest in adolescents' psychological resilience and coping strategies in the face of adversity.

Overall, quantitative research overwhelmingly dominated across themes and participant groups. In contrast, qualitative approaches (including interviews and case studies) were minimally represented and appeared only in a limited number of themes, such as educational applications and sociocultural perspectives. This pattern suggests a notable lack of research exploring adolescents' subjective experiences and culturally embedded meanings of psychological capital.

In addition, studies involving children were extremely scarce across all themes and methods. In particular, qualitative and practice-oriented designs, such as action research, were rarely applied to child populations. This imbalance indicates substantial opportunities for future research to expand psychological capital studies by integrating underrepresented participant groups with diverse methodological approaches, thereby enhancing the applicability of psychological capital across developmental stages and sociocultural contexts.

## DISCUSSION AND CONCLUSION

### Distribution and Trends of Research Themes

The findings of the present study indicate that positive psychology and resilience constitute the dominant research themes in studies on adolescent psychological capital. Research grounded in positive psychology accounted for 37.3% of the reviewed literature (44 articles), reflecting scholars' strong emphasis on the constructive functions of psychological capital in adolescents' psychological development and adaptation. Similarly, the prominence of resilience highlights the central role of psychological adjustment and crisis response in this research domain.

In contrast, themes such as well-being, sociocultural perspectives, and sport psychology were comparatively less frequently examined. This imbalance suggests that the application of psychological capital within broader cultural contexts and physical activity-based interventions remains underdeveloped. At the same time, the presence of these themes indicates emerging scholarly efforts to explore psychological capital from both macro-level sociocultural frameworks and micro-level applied perspectives, pointing to potential directions for future thematic expansion.

### Concentration of Research Participants

The cross-analysis revealed a pronounced concentration of research participants in college students (30.5%) and adolescents (24.6%). For example, approximately 80% of studies on self-efficacy focused on college student samples, while studies on resilience and positive psychology were primarily conducted with adolescent and college student populations. This pattern suggests that psychological capital research has largely targeted individuals in secondary and tertiary education contexts, where access to participants and standardized measurement tools may be more feasible.

In contrast, children and adult populations were substantially underrepresented, indicating that current psychological capital research has not yet been sufficiently extended to both ends of the life course. Future studies may benefit from expanding research into elementary and middle school populations, as well as early intervention contexts, to examine the development and longitudinal effects of psychological capital across developmental stages.

### Methodological Characteristics of Existing Research

Consistent with prior observations, quantitative research, particularly questionnaire- and scale-based designs, remains the dominant methodological approach in psychological capital studies. While such methods facilitate large-scale empirical validation, the limited use of qualitative approaches, including interviews,

action research, and case analyses, constrains deeper understanding of adolescents' lived experiences and contextual meanings of psychological capital.

Notably, although literature reviews represent a common methodological approach, their integration with empirical research designs may further strengthen the linkage between theory and practice. In addition, there remains considerable room for methodological advancement through mixed-methods designs and cross-method triangulation, which could enhance both explanatory depth and practical applicability.

## Conclusion

Through literature review and cross-analysis of research themes, participant groups, and methodologies in recent studies on adolescent psychological capital, the present study yields three primary conclusions:

1. Research themes are predominantly centered on positive psychology and resilience, indicating thematic concentration. Topics such as well-being, sociocultural contexts, and other micro-level dimensions warrant further exploration.
2. Research participants are mainly drawn from college student and adolescent populations, while children and adults remain underrepresented. Future research should strengthen cross-age and longitudinal investigations.
3. Research methods are largely quantitative in nature. Although qualitative and mixed-methods approaches have gradually increased, greater methodological diversity and cross-context validation are recommended.

Taken together, these findings suggest that research on adolescent psychological capital is gradually moving toward a more integrative trajectory that balances theoretical development with practical application. Future research may further solidify its empirical foundations and local relevance by expanding thematic scope, integrating diverse methodologies, and including broader participant populations across developmental and sociocultural contexts.

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