

Shaping Futures with Social-Emotional Learning

A Retrospective Study of SEL, Retention and Educational Pathways
for Adolescent Girls in Government Residential Schools in Telangana, India

2018-2025



Learning Curve Life Skills Foundation

July 2026

Executive Summary

This report presents a retrospective analysis of a Social and Emotional Learning intervention implemented across government residential girls' schools (KGBVs) between 2018 and 2025.

170

intervention
schools

24

comparison
schools

Core finding

Intervention schools show stronger enrolment growth and greater reduction in dropout, while maintaining already high Grade 10 pass percentages. Students also show more diverse post-Grade 10 pathways.

How to read the evidence

The results should be interpreted as indicative signals rather than causal proof. The retrospective design, unequal sample sizes, and possible baseline differences limit causal attribution.

Why this matters

In the context of adolescent girls in residential schools, the patterns point to SEL's potential role in strengthening participation, retention, decision-making, and sustained educational trajectories.

Evidence at a glance

1

Access

Enrolment growth was stronger in schools where SEL was actively facilitated.

2

Retention

Dropout declined more sharply in where SEL was actively facilitated.

3

Achievement

Grade 10 pass percentages stayed high and stable.

4

Continuity

Post-Grade 10 pathways appear more diversified where SEL was actively facilitated.

5

Barriers

Intervention schools show more nuanced tracking of barriers.

The current report is best positioned as a strong retrospective signal that justifies deeper, prospective and more rigorous research - especially on how SEL supports adolescent girls' agency, belonging, retention and transitions.

Program overview

acSELeRate , Learning Curve’s core Social and Emotional Learning intervention is a comprehensive, school-based approach designed to strengthen students’ social, emotional, and behavioural competencies.

It supports students to understand and manage emotions, build positive relationships, make responsible decisions, and engage meaningfully with their learning environment.

Grounded in global frameworks and contextualised for Indian schools, the intervention draws from WHO and CASEL frameworks and has been adapted through iterative field testing for the Indian school ecosystem.

Key SEL Competencies

Five core competencies that support academic success, wellbeing, and sustained student engagement.



Self-awareness

Understanding one’s emotions, strengths, and responses.



Self-management

Managing emotions, behaviour, and actions effectively.



Social awareness

Understanding others and responding with empathy.



Relationship skills

Building positive, respectful, and supportive relationships.

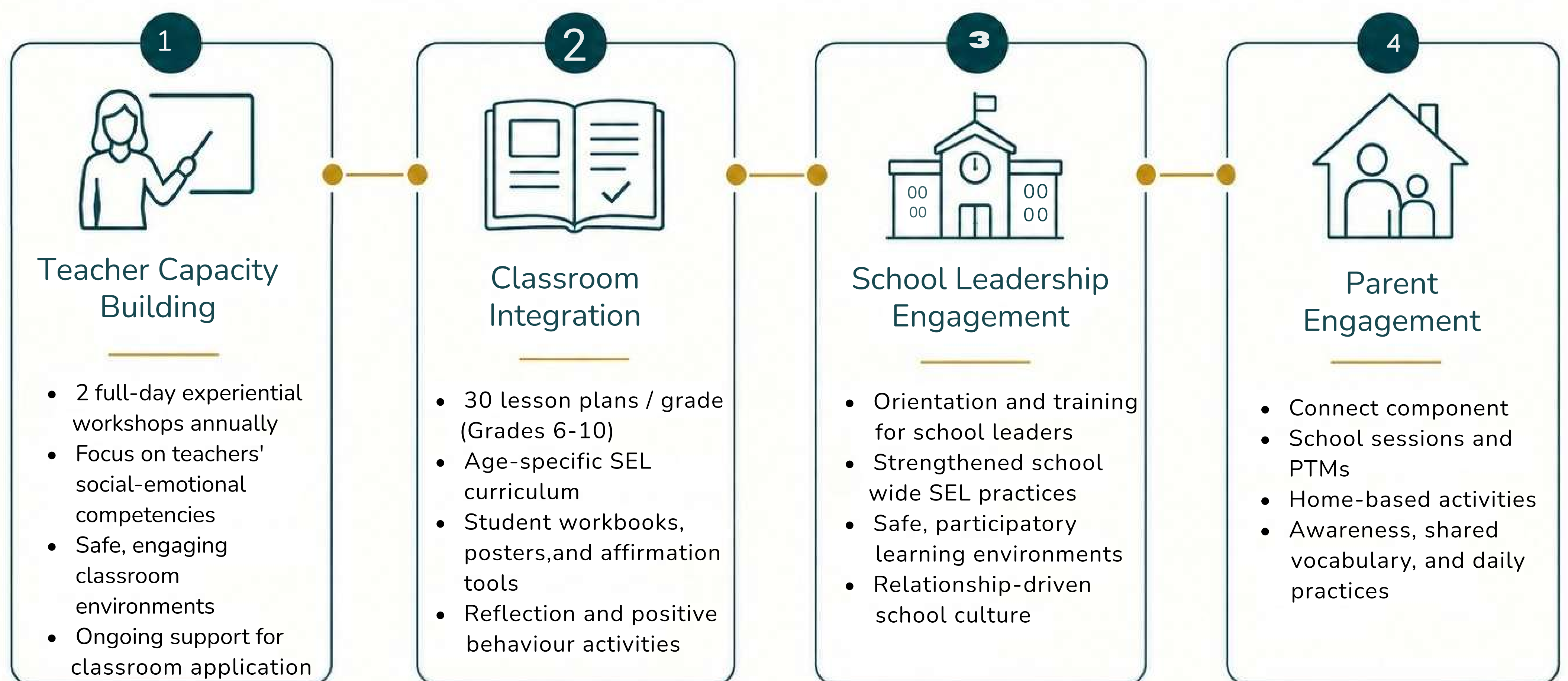


Responsible decision-making

Making thoughtful, constructive, and ethical choices.

How the program was implemented

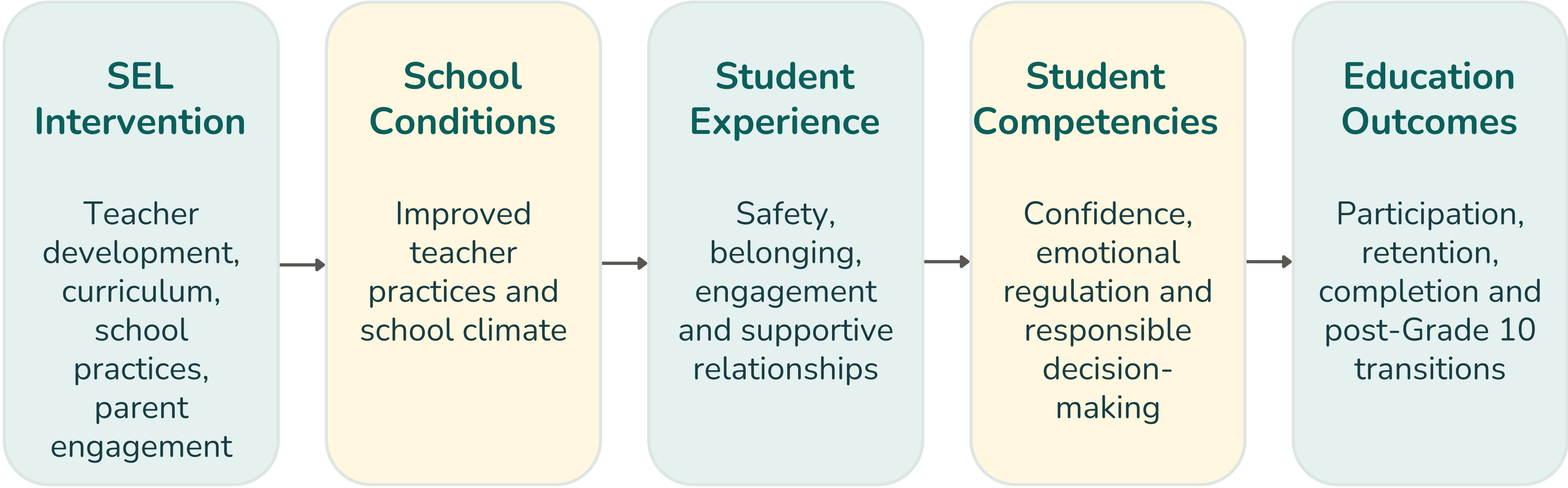
Classroom + School + Home



Overall, the program aimed to create a coherent SEL ecosystem, ensuring that students experienced consistent support across classroom, school and home environments.

Theory of Change

How SEL is expected to influence educational trajectories



Why the gender lens mattered

In the context of adolescent girls in residential schools, barriers such as early marriage, family responsibilities and limited support systems can disrupt educational continuity. SEL may contribute to strengthening girls' agency, relationships and ability to navigate these challenges.

This framework informed the interpretation of findings and highlights the mechanisms through which SEL was expected to influence educational trajectories.

Purpose of the study

This study examines patterns of change in key educational indicators over time and compares outcomes between schools that implemented SEL and those that did not.

Study objective

To understand the extent to which SEL implementation is associated with improvements in access, retention, Grade 10 completion, education continuity, and barriers to learning.

KEY RESEARCH QUESTION

How did key educational indicators change over time in SEL intervention schools compared with comparison schools?



ENROLMENT



DROPOUTs



GRADE 10
COMPLETION



EDUCATION
CONTINUITY



BARRIERS TO
LEARNING

The study adopted a retrospective comparative design, analysing existing school-level data over time to identify trends and differences between intervention and control groups.



1

Study Design

Retrospective comparative analysis using existing school-level data over time.



2

Sample

170 intervention schools where SEL was implemented
24 control schools without SEL implementation



3

Data Sources

Departmental and administrative data
School-level records
Field-based inputs and observations



4

Indicators

Enrolment (access and participation)
Dropout rates (student retention)
Grade 10 pass percentage (academic performance)
Education continuity (post-Grade 10 pathways)
Barriers to education (contextual challenges affecting students)



5

Analysis Approach

Trend analysis to track changes in key indicators over time
Group comparison between intervention and control schools
Indexing of data to enable comparison of trends between groups with different baseline values and sizes
Statistical testing to determine the significance of observed differences



Note on Indexing

Indexing was used to standardise values across years, allowing for a clearer comparison of growth patterns between intervention and control schools, independent of their initial levels.

Data Collection Process

Data for the study were collected through a structured process involving both departmental coordination and direct engagement with schools. To ensure consistency across indicators, a set of guiding questions was developed to capture information related to enrolment, dropout, academic performance, education continuity, and reasons for discontinuation.



Department Coordination

Collaboration with the education department to access available records and validate school-level information.

School Outreach

Direct outreach to schools through phone calls, where school representatives provided data based on records and field-level knowledge.

Structured Questions

Use of structured questions to standardise responses across schools and ensure comparability of data.



This approach enabled the collection of both quantitative data and contextual insights, while maintaining consistency across a large number of schools.

Interpreting the Findings

Important considerations before reading the evidence

This study is not designed to establish causal relationships.
The findings reflect patterns of association between
SEL implementation and educational outcomes.

Comparison group

The comparison group is smaller and may differ from intervention schools in baseline characteristics.

Aggregated data

School-level data does not capture individual student variation or pathways.

Data quality

Availability and reporting practices vary across schools, leading to possible gaps or inconsistencies.

External factors

Policy changes and local contexts are not controlled for in this analysis.

Future research

The current analysis is a foundation for more rigorous longitudinal or experimental studies.

Key Findings

1

Improved access

Intervention schools recorded stronger enrolment growth.

2

Strengthened retention

Dropout rates reduced more substantially in intervention schools.

3

Stable academic performance

Grade 10 pass percentages remained high across both groups.

4

Education continuity

Post-Grade 10 pathways appear more diverse in intervention schools.

5

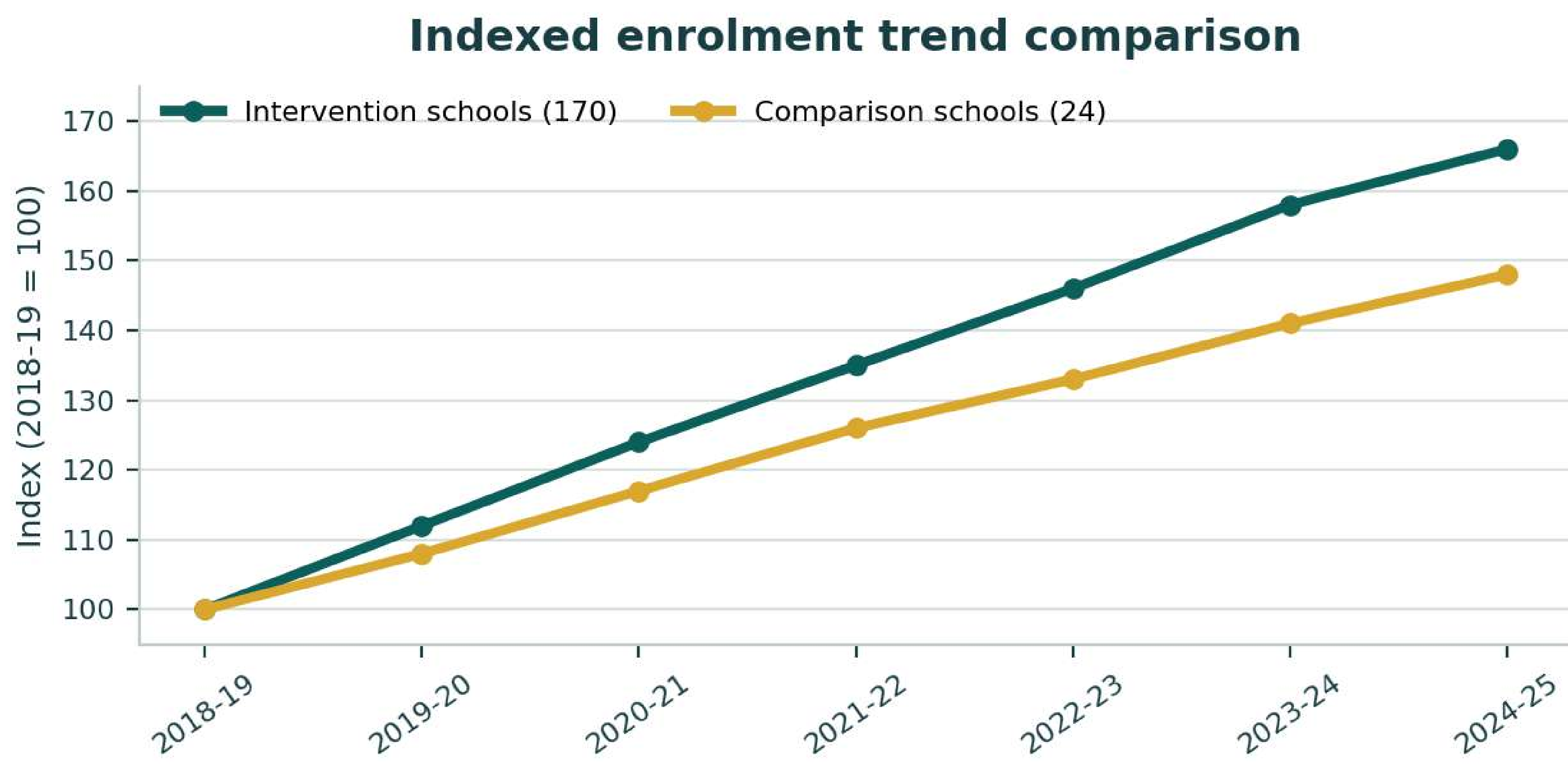
Understanding barriers

Intervention schools appear to track and report student barriers more robustly.

The strongest evidence is in enrolment growth and dropout reduction; other indicators enrich the interpretation and point towards future research priorities.

Improved Access to Education

Enrolment growth in intervention schools



132.6

average increase in intervention schools

83.4

average increase in comparison schools

$p < .001$

statistically significant

$r = .31$

moderate positive association

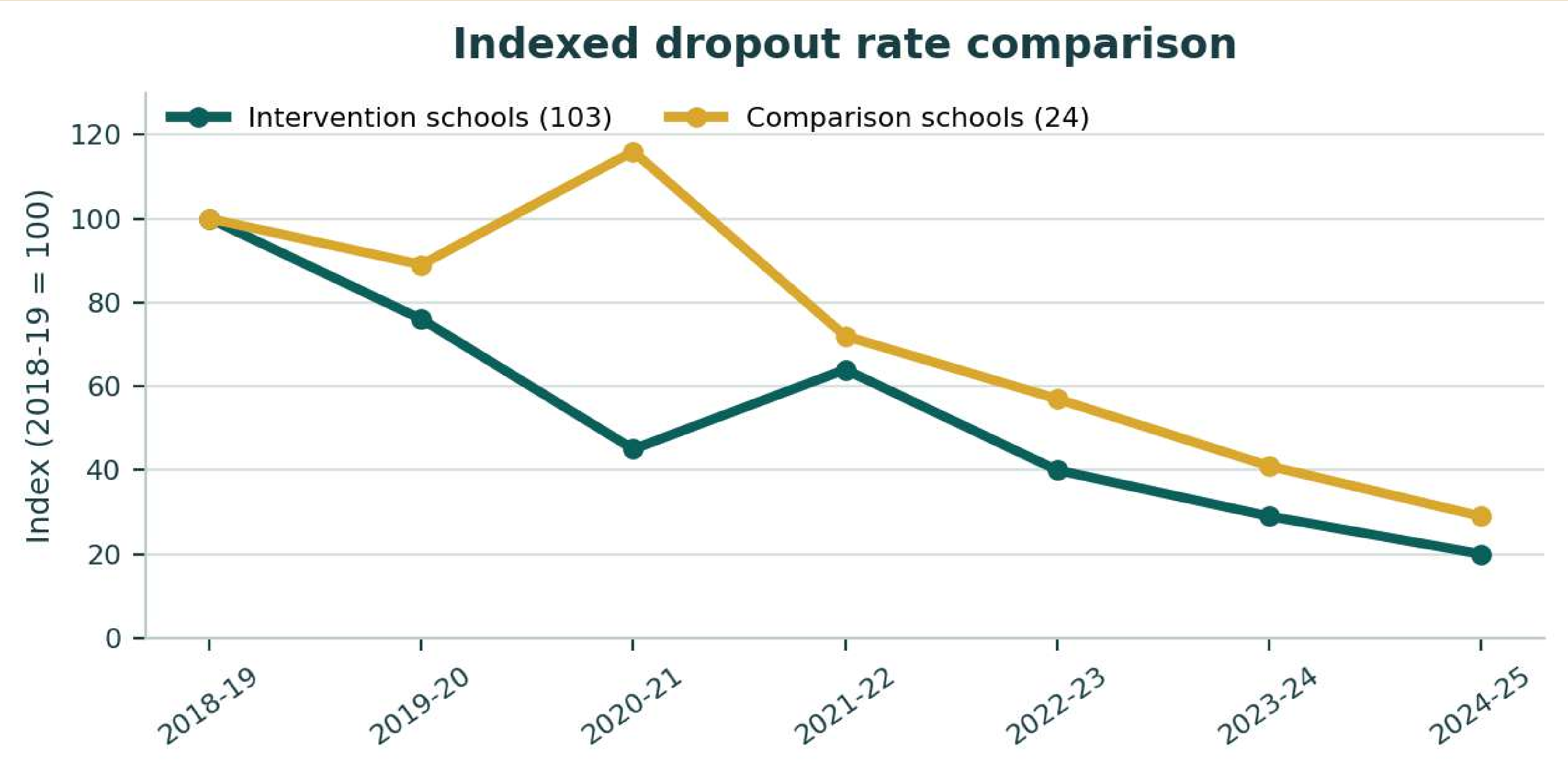
Interpretation

Schools that implemented SEL demonstrated substantially higher growth in enrolment compared to comparison schools, suggesting stronger student participation and engagement. This pattern was evident across multiple years, reflecting sustained improvement rather than a one-time change.

Caution: This is an association within the available dataset; the retrospective design does not establish causal attribution.

Strengthened Retention

Dropout reduction in intervention schools



-0.236

avg. dropout
change in
intervention

-0.043

avg. dropout
change in
comparison

p = .009

statistically
significant

r = -.07

modest
negative
association

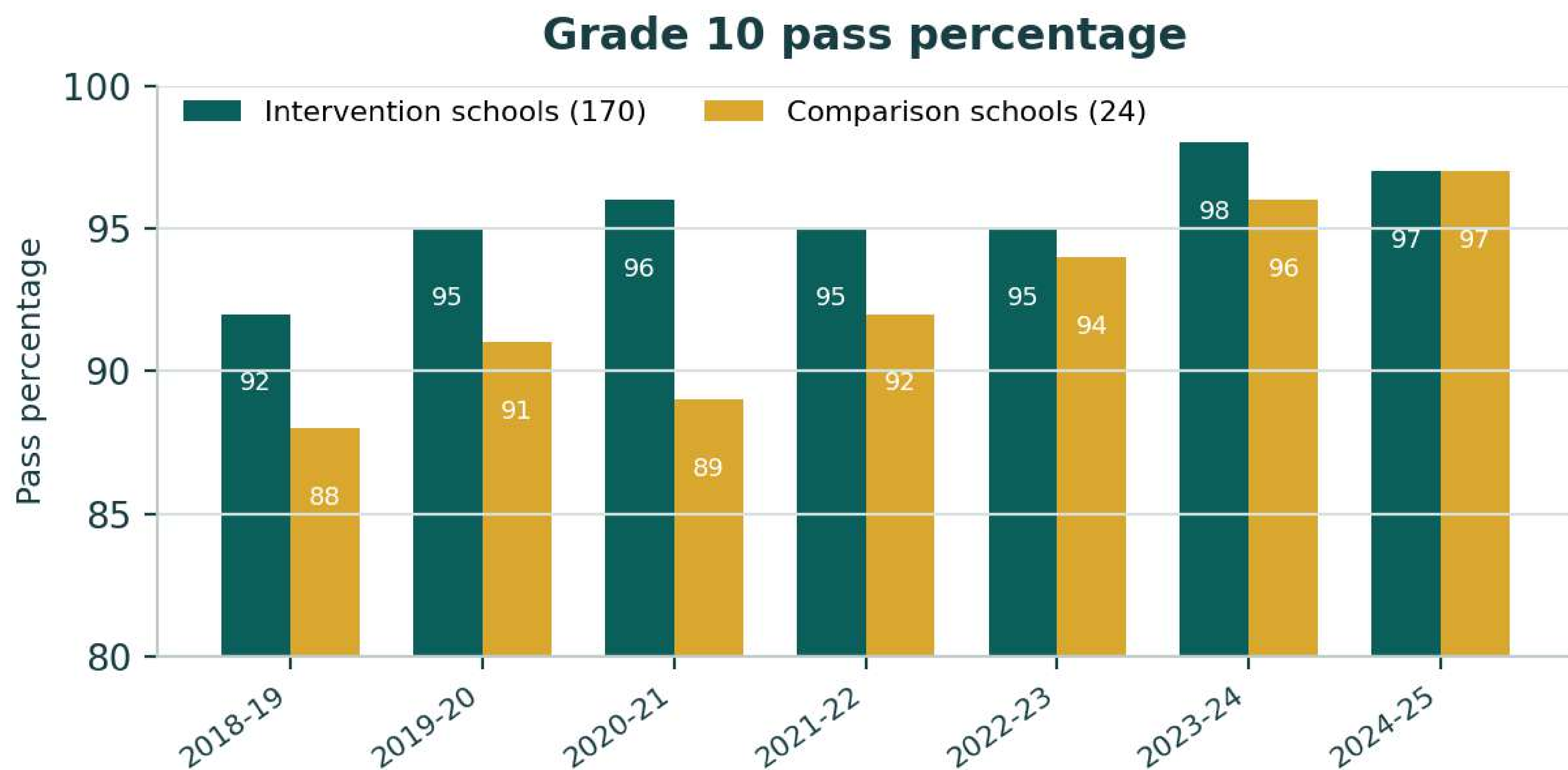
Interpretation

Schools implementing SEL showed a greater reduction in dropout rates compared to comparison schools. This suggests that SEL may contribute to enhanced student engagement, a stronger sense of belonging, and improved relationships within the school environment.

Note: Dropout data was available for 103 intervention schools and 24 comparison schools.

Learning Outcomes

Grade 10 pass percentage



0.071

avg. increase
in intervention
schools

0.084

avg. increase
in comparison
schools

p = .348

not
statistically
significant

r = -.03

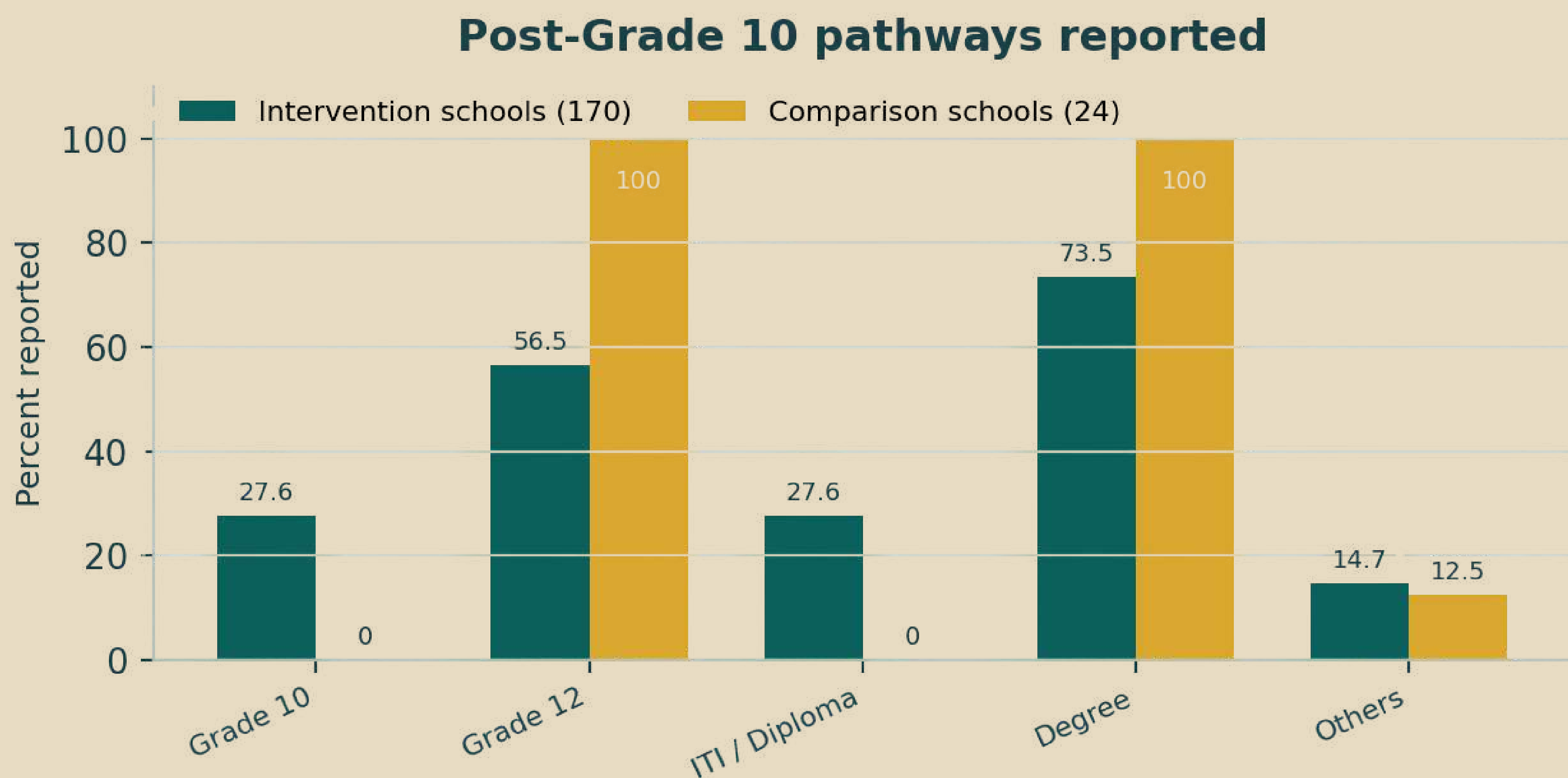
no meaningful
association

Interpretation

Both groups maintained consistently high Grade 10 pass percentages over time. SEL implementation was associated with stronger access and retention outcomes, while academic performance remained high and stable across both groups.

Education Continuity

Post-Grade 10 pathways

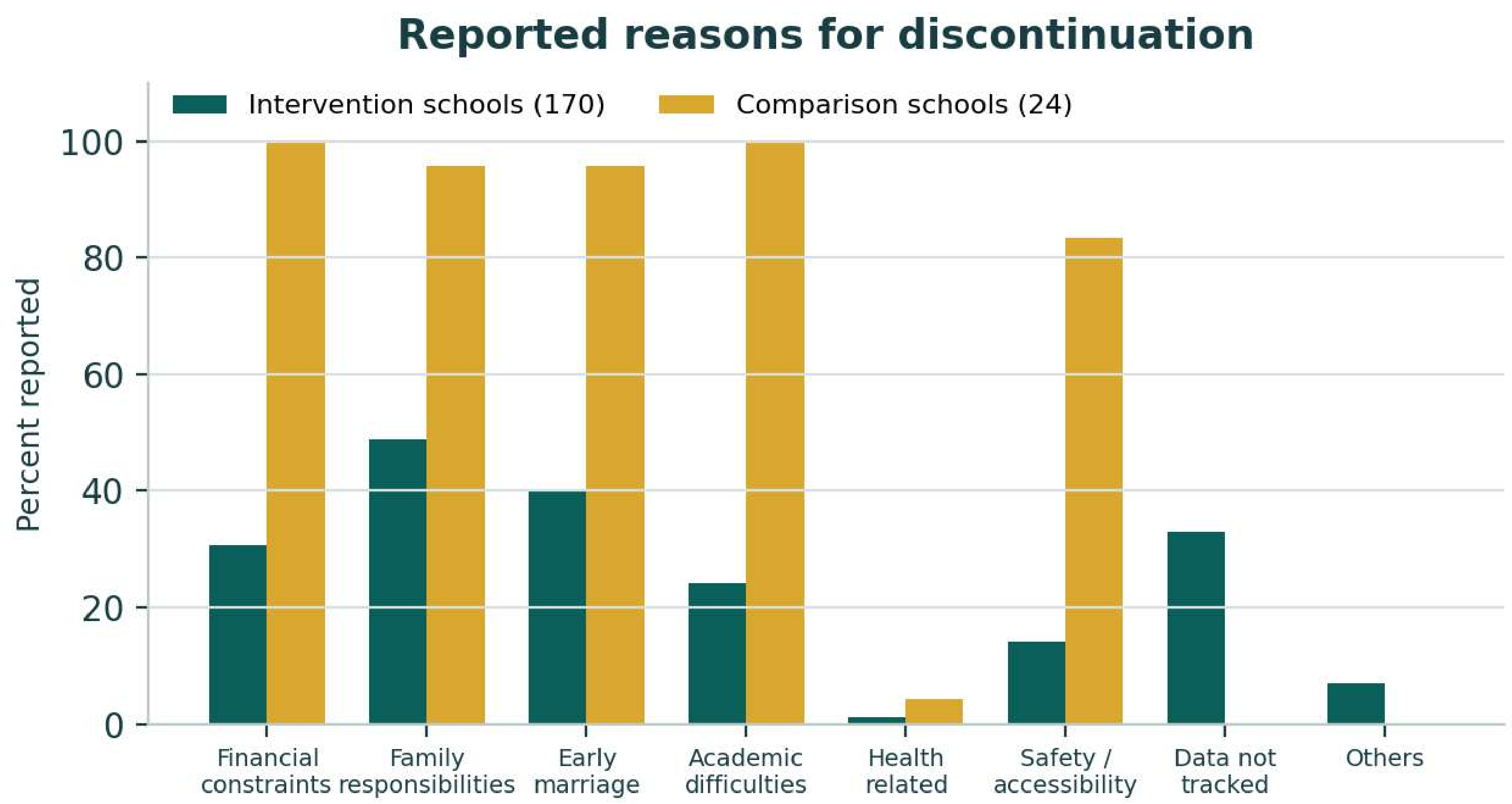


Interpretation

Intervention schools show a more diversified distribution of post-Grade 10 pathways, including higher secondary education, degree programmes, and vocational options such as ITI, nursing and diplomas. This may indicate greater student agency and informed decision-making.

Understanding Barriers

Reported reasons for discontinuation



Interpretation

Across both groups, barriers include family responsibilities, early marriage, financial constraints and academic difficulties. Intervention schools show a more distributed pattern of reported challenges and a higher presence of tracked cases, suggesting greater awareness and monitoring of student-level risks.

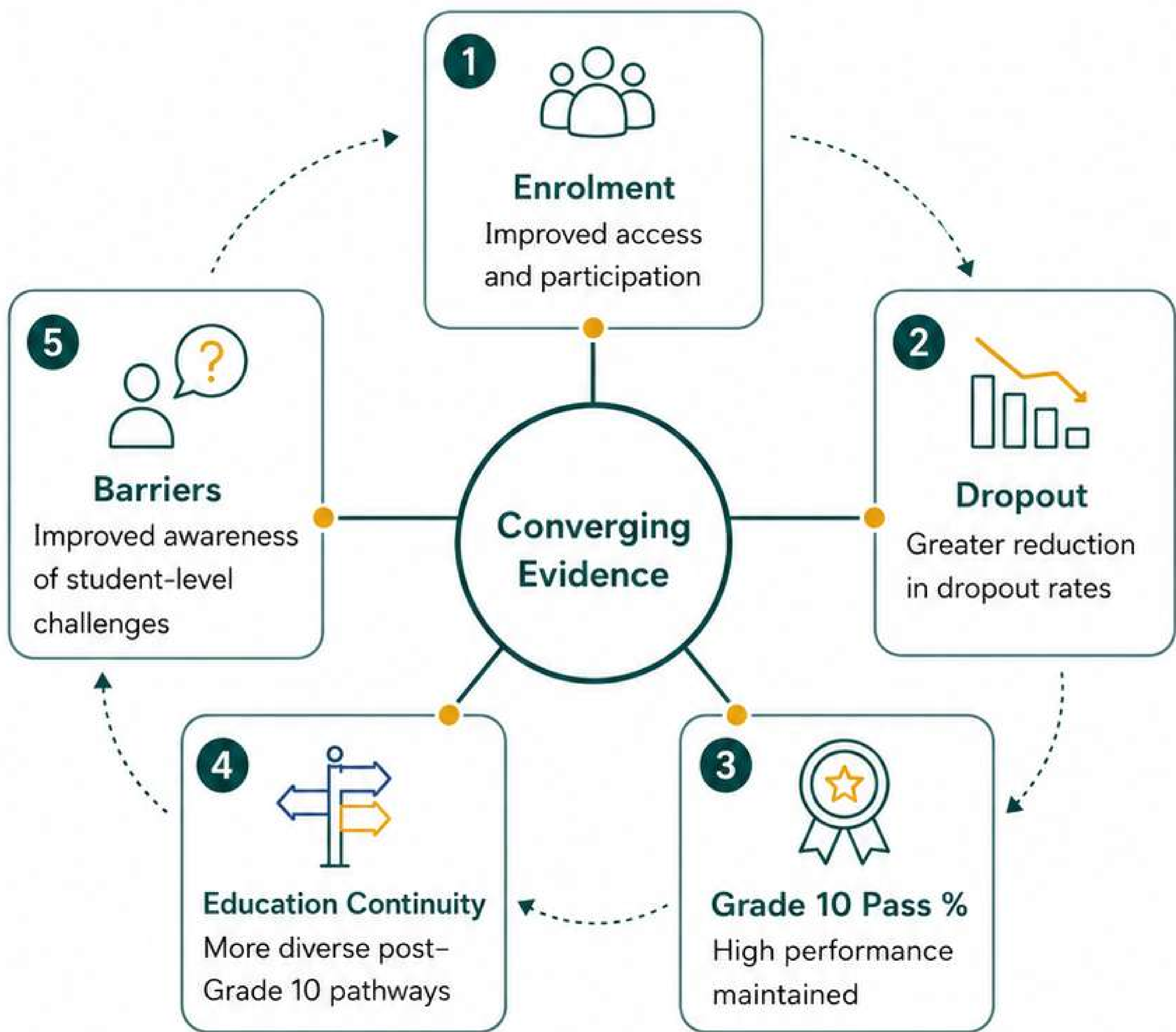
Interpretation caution

This should be read as contextual evidence, not as proof that SEL directly changed barriers. The value lies in how barrier data helps explain retention and continuity patterns.

Triangulation

Converging evidence across multiple indicators

The analysis brings together evidence across access, retention, achievement, transition, and contextual factors to provide a more holistic understanding of change.



Interpretation



When examined together, the indicators show a consistent pattern in favour of intervention schools. Stronger enrolment growth and greater dropout reduction suggest that more students are entering and remaining within the education system. At the same time, high Grade 10 pass percentages were maintained, indicating that gains in access and retention were achieved without compromising academic outcomes.

Overall, the findings point to broader system-level strengthening across access, retention, and progression, supported by a more responsive school environment.

Role of SEL for Adolescent Girls

The findings suggest that SEL may strengthen the conditions that enable girls to stay, learn and transition.

Confidence and voice

SEL may help girls develop confidence to express needs, seek support and make informed choices.

Belonging and relationships

Supportive peer and teacher relationships may improve engagement and reduce dropout risk.

Decision-making

Responsible decision-making and self-awareness may help girls navigate post-Grade 10 pathways.

Supportive systems

Teacher, parent and school leadership engagement can create a more responsive environment around girls.

Further research is needed to test these pathways more rigorously at the student level.

Implications and Future Research

The current study provides a strong foundation for a deeper research agenda that can move from programme evidence to field evidence.

For practice

SEL may be a foundational approach to improving student participation and retention.

For systems

Teacher capacity, school leadership and parent engagement appear central to sustainability.

For funders

The retrospective signal justifies more rigorous research on mechanisms, student-level outcomes and scalability.

Future research questions

- 1 How does SEL influence adolescent girls' retention and continuity in education?
- 2 What mechanisms link SEL to educational outcomes - school climate, belonging, agency, safety, relationships or decision-making?
- 3 Which components of the SEL model are most critical for change, and what is the minimum viable model for scale?
- 4 How does SEL shape adolescent girls' agency, aspirations and decision-making during key transition points?

Limitations

Important considerations while interpreting the findings

This study is based on a retrospective analysis of existing data, which limits the ability to establish direct causal relationships between SEL implementation and observed outcomes. The findings indicate associations and patterns rather than definitive cause-and-effect conclusions.



1. Retrospective design

Findings indicate associations, not direct causal effects.



2. Aggregated data

School-level data may not capture variation at the individual student level.



3. Context differences

School contexts, reporting practices, and data availability may influence observed trends.



4. Sample imbalance

The difference in sample size between intervention and control schools may affect comparability.



Despite these limitations, the use of multiple indicators and converging evidence across outcomes strengthens the overall reliability of the findings.

Annexure: Methods and Data Notes

Sample by indicator

Indicator	Intervention	Comparison	Notes
Enrolment	170	24	2018-19 to 2024-25
Dropout	103	24	available schools only
Grade 10 pass %	170	24	administrative data
Continuity	170	24	denominator to be clarified
Barriers	170	24	reported categories

Key methods notes

Design	Observational retrospective comparative analysis; not causal.
Comparison group	Selected based on data availability and school type; exact baseline matching was not undertaken.
Processing	Data aggregated at school level; change over time calculated between baseline and latest year.
Analysis	Descriptive trends, indexed comparison, independent samples t-tests and Pearson correlations.
Missing data	No imputation was applied; missing or inconsistent entries were retained as reported and interpreted with caution.

All findings should be read as indicative patterns of association. Further longitudinal or experimental research is required to establish causal impact.

Acknowledgements

This report is the result of the collective efforts of educators, school leaders, government partners, and the Learning Curve team, all working towards a shared goal of strengthening educational opportunities for adolescent girls.

We sincerely thank the Department of School Education and the leadership and staff of Kasturba Gandhi Balika Vidyalayas (KGBVs) for their continued partnership and for facilitating access to school-level information that made this study possible.

We are grateful to the head teachers, teachers, and school teams across intervention and comparison schools who generously shared records, insights, and experiences. Their commitment to supporting girls' education is reflected throughout this report.

Our appreciation also goes to the Learning Curve team, whose years of programme implementation, field engagement, and data collection created the foundation for this retrospective analysis.

Finally, we acknowledge the thousands of adolescent girls whose determination to continue learning inspires our work every day. We hope this report contributes to a deeper understanding of how schools can create environments where every girl has the opportunity to learn, thrive, and shape her future.



About Learning Curve

Learning Curve Foundation is a not-for-profit organisation working to ensure that every child has the opportunity to thrive. We partner with governments, schools, educators, and communities to strengthen children's holistic development through evidence-informed programmes and system-level partnerships.

Over the past decade, our work has reached thousands of children across government and low-cost private schools through programmes that build social and emotional learning, academic readiness, digital literacy, financial capability, environmental responsibility, physical well-being, and safe learning environments.

Our flagship Social and Emotional Learning program, acSELeRate, is implemented through a whole-school approach that combines classroom curriculum, teacher professional development, school leadership engagement, parent participation, and continuous assessment. The program has been recognised among the world's leading education innovations by global organisations, including the LEGO Foundation's SEL Spotlight and HundrED's Global Collection.

At Learning Curve, we believe that when children develop the confidence, relationships, and life skills to navigate challenges, they are better equipped to stay in school, continue learning, and build brighter futures.

Where every child and young person can THRIVE.

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