

## **Research Proposal**

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## **Introduction**

Education plays a major role in shaping long-term success and overall well-being. Research has shown that academic achievement is connected to improved self-esteem, physical health, and future opportunities, while poor educational outcomes are associated with mental health disorders, substance abuse, and chronic health conditions (Devaux et al., 2011; McKenzie, 2019; Zapata-Lamana et al., 2021). In the United States, concerns about declining literacy rates and widening educational inequalities continue to grow, particularly among students from disadvantaged communities (Merry, 2013). One important issue related to literacy development is “summer slide,” a term used to describe the academic skill loss students experience during summer vacation when formal classroom instruction is unavailable (Dydia et al., 2015; Workman et al., 2023). Because literacy skills can deteriorate during extended school breaks, educators and librarians have searched for strategies that encourage continued reading and learning outside of school.

Public libraries are uniquely positioned to address this problem because they provide free educational resources, community programming, and access to reading materials. Summer reading programs (SRPs) are one of the most common literacy initiatives offered through public libraries. These programs encourage children to read during summer vacation through incentives, activities, and organized reading goals. While SRPs are widely promoted as tools for preventing summer learning loss, there is ongoing debate regarding whether they significantly improve measurable academic achievement. The purpose of this study is to examine how participation in public library summer reading programs affects academic achievement and reading engagement among sixth-grade students in the Tucson metropolitan area. Specifically, this study asks the following question: How does participation in public library summer reading programs affect

academic achievement and reading engagement among public school sixth graders compared to peers who do not participate? This study hypothesizes that participation in SRPs will be positively associated with reduced summer learning loss, stronger reading engagement, and improved academic outcomes after accounting for outside variables.

## **Literature Review**

Research on public library summer reading programs is commonly connected to theories of summer learning loss, reading motivation, and literacy engagement. The theory of “summer slide” suggests that students lose academic skills during the summer due to the absence of structured instruction (Dydia et al., 2015; Workman et al., 2023). Public libraries have responded to this issue by developing summer reading programs that encourage literacy development and maintain reading habits during school breaks.

Several researchers emphasize the importance of reading motivation and engagement in successful literacy development. Locke (1988) argued that librarians should select books based on children’s interests while creating activities that support cognitive engagement. Hughes (1990), Lu and Gordon (2007), and Bogaert et al. (2025) similarly found that students are more likely to participate in reading programs when librarians create positive environments, encourage student choice, and connect activities to children’s interests. Small et al. (2017) explained that both intrinsic motivation, such as enjoyment and confidence, and extrinsic motivation, such as incentives and rewards, can influence participation in summer reading programs.

Previous research has generally found that summer reading programs positively influence reading engagement and literacy habits. Hughes (1990) found that children were more likely to participate when reading was presented as enjoyable rather than academic work. Lu and Gordon

(2007) similarly found that students preferred books connected to their personal interests and experiences. Dynia et al. (2015) observed that children participating in summer reading clubs visited libraries more frequently, read with family members, and engaged in literacy activities throughout the summer. Roman and Fiore (2012) concluded that students who participated in public library summer reading programs returned to school with stronger confidence, motivation, and readiness to learn. Gwilliam and Limbrick (2016) also found that collaborative reading programs involving schools, homes, and libraries helped students maintain reading achievement while improving reading enjoyment.

Although many studies support the value of SRPs, findings related to academic achievement remain inconsistent. Dynia et al. (2015) found that while students participating in summer reading programs did not experience significant summer learning loss, there was no statistically meaningful difference in reading achievement between participants and nonparticipants. Bogaert et al. (2025) also reported mixed results, finding improvements in reading motivation and strategy use but limited gains in reading comprehension scores. Nicholson and Tiru (2019) similarly found that summer reading interventions improved word-reading skills without fully preventing declines in reading comprehension. Workman et al. (2023) challenged assumptions about summer learning loss by demonstrating that findings vary significantly depending on datasets, assessments, and demographic factors. Their research suggested that broader social inequalities related to race, income, and educational access may shape learning outcomes more than participation in short-term summer programs alone.

Another important theme in the literature concerns inequality and access to educational resources. Researchers have repeatedly identified barriers such as transportation, internet access, family income, and funding limitations as factors influencing participation in summer reading

programs. Simisaye and Quadri (2010) found that attendance in the Lagos State Library summer reading program was limited because many families lacked transportation and access to resources. Lu and Gordon (2007) also found that technology-based reading programs created barriers for students without reliable internet access. Workman et al. (2023) argued that socioeconomic inequality strongly affects educational outcomes during summer vacation. These findings suggest that the effectiveness of SRPs may depend heavily on community resources and support systems.

Despite the substantial amount of research on summer reading programs, several gaps remain. First, relatively few studies focus specifically on sixth-grade students transitioning into middle school. Second, many studies emphasize motivation and participation without directly comparing academic outcomes between participants and nonparticipants. Third, researchers continue to debate whether short-term programs significantly improve reading comprehension. Finally, there is limited research examining both academic achievement and reading engagement together within public library summer reading programs. This study addresses these gaps by focusing specifically on sixth-grade students in Tucson, Arizona, while comparing both academic achievement and reading engagement outcomes between SRP participants and nonparticipants.

## **Methodology**

This study will use a quasi-experimental mixed-methods research design to examine the effectiveness of public library summer reading programs on academic achievement and reading engagement among sixth-grade students. A quasi-experimental design is appropriate because students cannot be randomly assigned to participate in summer reading programs. Instead, the

study will compare students who voluntarily participate in SRPs with students who do not participate.

The study will focus on summer reading programs within the Pima County Public Library System in Tucson, Arizona. Participating locations will include Tucson-area branches such as Joel D. Valdez Main Library, Murphy-Wilmot Library, Nanini Library, Santa Rosa Library, Valencia Library, and Woods Memorial Library. Branches outside the Tucson metropolitan area will be excluded in order to maintain consistency in community demographics and geographic location.

Participants will consist of sixth-grade students enrolled in the Tucson Unified School District (TUSD). Sixth graders were selected because students at this level are generally expected to read independently, reducing the influence of guardians reading to children. According to the National Center for Education Statistics (n.d.), approximately 40,316 students were enrolled in TUSD during the 2024–2025 academic year, including approximately 2,872 sixth graders. To achieve a 95% confidence interval with a 5% margin of error, the projected sample size is approximately 350 students before attrition. The district population is composed primarily of Hispanic students, followed by White and African American students, while approximately 90% of sixth-grade students are proficient in English (Tucson Unified District, n.d.).

The treatment group will consist of students participating in one or more summer reading programs, while the control group will consist of students who do not participate in any SRP. Recruitment will occur through flyers posted in middle schools and libraries, school newsletters, and social media outreach through Tucson Unified School District and the University of Arizona. Participation will require parental consent and student assent because the study involves minors.

One potential limitation of this study involves selection bias. Families already interested in literacy and education may be more likely to participate in SRPs and volunteer for the study. Household income and parental education levels may also influence literacy outcomes. Tucson has a relatively well-educated population, with 90.5% of adults holding a high school diploma and 36.8% holding a bachelor's degree or higher (U.S. Census Bureau, n.d.). To reduce selection bias, the study will use statistical controls and propensity score matching.

The study will use surveys, questionnaires, interviews, and standardized reading assessments as data collection instruments. STAR Reading assessment scores, as well as AASA, i-Ready, and DIBELS scores when available, will be used to measure reading comprehension, vocabulary, fluency, and literacy development. Pre-test and post-test assessment scores will allow researchers to determine whether participation in summer reading programs is associated with changes in reading performance.

Surveys and questionnaires will measure reading engagement, literacy habits, and attitudes toward reading. Students will answer questions about library visits, reading frequency, confidence in literacy skills, and enjoyment of reading. Survey responses will use a Likert-scale format ranging from strong dislike of reading to strong enjoyment of reading. These instruments were selected because prior SRP research frequently used surveys, interviews, and standardized assessments to measure literacy engagement and academic outcomes (Dydia et al., 2015; Small et al., 2017).

The study will begin with participant recruitment from March 1, 2027, through May 1, 2027. Families will complete application forms indicating whether students intend to participate in summer reading programs. Consent forms will explain the purpose of the study, confidentiality

protections, potential risks and benefits, and voluntary participation rights. Baseline data collection will occur from May 2027 through August 2027. Students will complete reading attitude surveys and provide baseline academic assessment data. Researchers will also collect demographic information such as race, gender, English learner status, and household income.

During Summer 2027, students may participate in interviews or focus groups discussing reading motivation, confidence, library experiences, and literacy habits. These interviews may occur in person, by phone, or through secure video conferencing. Outcome data collection will occur from August 2027 through October 2027 after students return to school. Researchers will collect post-summer reading assessment scores and administer follow-up surveys to compare outcomes between participants and nonparticipants.

### **Analysis Plan**

This study will use both quantitative and qualitative analysis methods to examine the relationship between SRP participation, academic achievement, and reading engagement. The independent variable is participation in summer reading programs, measured as a binary variable indicating whether students participated or did not participate. Dependent variables include reading achievement scores, English Language Arts grades or GPA, reading engagement scores, and reading frequency.

Several covariates will be included to account for pre-existing differences among students, including baseline reading scores, socioeconomic status, English learner status, race, gender, and school attended. Descriptive statistics will summarize participant demographics and identify baseline differences between groups. Independent samples t-tests will compare mean reading outcomes and engagement levels between SRP participants and nonparticipants.

The primary statistical analysis will involve multiple regression analysis and ANCOVA to estimate the effects of SRP participation while controlling for baseline achievement and demographic variables. Difference-in-differences analysis will compare changes in reading scores from spring to fall between treatment and control groups. Propensity score matching will also be used to reduce selection bias and create more comparable participant groups.

Qualitative data collected through surveys, interviews, and focus groups will be analyzed using thematic coding. Researchers will identify themes related to motivation, confidence, reading enjoyment, barriers to participation, and library engagement. Thematic coding is appropriate because it allows researchers to identify recurring patterns in student experiences and literacy behaviors. Quantitative and qualitative findings will be analyzed separately and integrated during interpretation. Quantitative results will determine whether SRPs influence academic outcomes, while qualitative findings will explain why and how those effects occur.

### **Timeline**

The proposed study will follow a structured timeline beginning with the literature review from October 2026 through January 2027. Institutional Review Board approval will occur from January 2027 through March 2027 to ensure compliance with ethical standards for research involving minors. Participant recruitment will occur from March 2027 through May 2027 through schools, libraries, and community outreach. Baseline data collection will take place from May 2027 through August 2027 prior to the start of summer reading programs. Outcome data collection will occur from August 2027 through October 2027 after students return to school. Data analysis will occur from November 2027 through January 2028. Writing and revision of the

final report will occur from January 2028 through May 2028, with final completion scheduled for May 2028.

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Appendix A

Parent/Guardian Consent Form and Student Survey

Parent/Guardian Informed Consent Form

Because participants in this study are under the age of 18, parent or guardian consent is required before participation. This study examines how participation in public library summer reading programs affects sixth graders' reading engagement, reading comprehension, and academic achievement.

By signing this form, you are voluntarily allowing your child to participate in a 5–10 minute survey regarding public library summer reading programs. Participation is voluntary, and all information collected will remain confidential and will only be used for research purposes. Participants may withdraw from the study at any time without penalty.

Please indicate your decision below:

Yes \_\_\_\_\_ No \_\_\_\_\_

Parent/Guardian Signature: \_\_\_\_\_

Child's/Student's Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Appendix B

### Student Survey Questionnaire

Directions: Please answer the questions below about reading, libraries, and summer reading programs. There are no right or wrong answers. Your answers will stay private and will only be used for this research project.

#### Section I: Demographic Information

1. What grade are you in?

2. How old are you?

3. What is your gender?

4. What is your race/ethnicity? (Check all that apply)

Asian

Native Hawaiian or Other Pacific Islander

Hispanic or Latino

White

American Indian or Alaska Native

Black or African American

Other: \_\_\_\_\_

Prefer not to answer

5. Do you live in Pima County?

Yes  No

6. Which Pima County Public Library do you visit most often? (Check one)

Dusenberry-River Library

Eckstrom-Columbus Library

- El Rio Library
- Flowing Wells Library
- Frank De La Cruz–El Pueblo Library
- Kirk-Bear Canyon Library
- Martha Cooper Library
- Miller-Golf Links Library
- Murphy-Wilmot Library
- Nanini Library
- Joel D. Valdez Main Library
- Quincie Douglas Library
- Sam Lena–South Tucson Library
- Santa Rosa Library
- Southwest Library
- Valencia Library
- W. Anne Gibson-Esmond Station Library
- Wheeler Taft Abbett Sr. Library
- Woods Memorial Library

## Section II: Summer Reading Program Participation and Reading Engagement

1. Do you join public library summer reading programs?

Yes  No

2. If yes, how often do you do summer reading activities?

Every day  Every week  Every two weeks  Once a month

3. About how many books do you read during the summer?

4. How often do you go to the library during summer break?

Every day  Every week  Every two weeks  Once a month  Rarely

5. What kinds of books do you like to read the most?

6. Do summer reading programs make you more interested in reading?

Yes  No  Not sure

Why or why not?

7. Do your parents, guardians, or teachers encourage you to read during the summer?

Yes  No

8. Do you think summer reading programs help improve your reading skills?

Yes  No  Not sure

Please explain:

9. How do you feel about your reading skills at school?

Very unconfident  Unconfident  Neutral  Confident  Very confident

10. Do you think reading during the summer helps you get ready for the next school year?

Yes  No  Not sure

Why or why not?

11. Have you noticed any changes in your reading, vocabulary, or grades after joining summer reading programs?

12. What do you enjoy most about public library summer reading programs?

13. What makes it hard for you to join summer reading programs?