

ADOLESCENTS' PERCEPTION ON EXTRACURRICULAR SPACES: A COMPREHENSIVE EXPLORATION OF ADOLESCENT PLAY LAB

By

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A thesis submitted to the BRAC Institute of Educational Development in partial fulfillment
of the requirements for the degree of
Master of Education in Educational Leadership & School Improvement

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Declaration

It is hereby declared that

1. The thesis submitted is my own original work while completing degree at BRAC University.
2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I have acknowledged all main sources of help.



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Approval

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Ethics Statement

This study was conducted in full adherence to ethical research principles, with special attention to the safety, comfort and well-being of adolescent participants. Approval for the research was obtained from the BRAC Institute of Educational Development (BRAC IED) prior to data collection. Participation in the study was voluntary, and verbal consent was obtained from school authority and assent from the participants and related caregiver. Adolescents, facilitators and field operation personnel of Adolescent Play Lab were informed about the purpose of the study, the types of data being collected, and their right to withdraw at any stage without consequence. Confidentiality and anonymity were highly maintained throughout the research process. No personal identifiers were collected in the final reporting, and all data were securely stored and used solely for academic purposes. No name of the participants was used in qualitative data reporting to protect their identities. In the case of photographic documentation for observational purposes, it was used responsibly and respectfully, focusing on activity rather than identity, and ensuring no participants portrayed in a vulnerable position. Every effort was made to create a safe, respectful, and supportive environment during data collection. FGD, survey and observations were conducted in familiar and comfortable settings, and participants were encouraged to share their experiences freely. This research upholds participant beneficence and wellbeing and seeks to elevate adolescents' voices in educational research through ethical, inclusive, and child-sensitive practices.

Abstract

This study explores adolescents' overall experiences, perceptions, and playful behaviors within the Adolescent Play Lab (APL) in rural Bangladesh. Conducted in four government schools, the research employs a mixed-methods approach, combining surveys, focus group discussions, and observations. The findings suggest that most adolescents view the APL as a positive and engaging environment that promotes creativity, social interaction, and a sense of belonging. Adolescents report enjoying group activities, feeling motivated to participate, and experiencing increased social connectedness. However, some challenges, including limited space and occasional boredom, were noted, highlighting areas for improvement. The study underscores the importance of well-designed play environments in supporting adolescent development, while also identifying issues such as space constraints and gender-related participation gaps. It concludes that incorporating adolescents' feedback is crucial for creating inclusive and meaningful extracurricular spaces, and that minor adjustments in space and activity planning can significantly enhance their experiences.

Keywords: Adolescent play lab; extracurricular space; playful behavior; perception, Bangladesh.

Dedication

My two families and Design team.

Acknowledgement

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List of Acronyms

APL – Adolescent Play Lab

EC- Extracurricular Activity

BRAC IED – BRAC Institute for Educational Development

BYP- BRAC Youth Platform

BCC - BRAC Creative Club

Chapter 1

Introduction and Background

1.1 Introduction

In Bangladesh, merely 4% of adolescents engage in extracurricular activities, underscoring the limited opportunities for their holistic development (BBS, 2018). Adolescence is a transformative phase of life marked by physical, cognitive, and social growth. It is a time when young people explore their identities, build self-concept, and seek belonging (Branje et al., 2021). Extracurricular activities, such as clubs and play labs, play an important role in supporting this development by fostering personal growth, creativity, and social engagement. Research by Eccles and Barber (1999) shows that participation in such activities can positively influence academic performance, self-esteem, and overall well-being. Yet, in rural Bangladesh particularly in regions like Cox's Bazar adolescents face stark disparities. While adolescents in urban areas benefit from various structured opportunities, those in rural settings often encounter limited resources and cultural barriers that render them invisible (Jubair & Mehenaz, 2024). In response to this gap, BRAC Institute of Educational Development (BRAC IED), in collaboration with the BRAC Youth Platform (BYP), introduced an after-school extracurricular initiative for adolescents in 2023. This initiative, originally named the BRAC Creative Club (BCC), was renamed in 2024 as the **Adolescent Play Lab (APL)**. It was implemented in several schools in Cox's Bazar to promote adolescent well-being and foster playfulness through engaging and supportive extracurricular experiences. According to Maria Montessori, the physical environment plays a fundamental role in shaping children's development and learning experiences (Migliani, 2021). In the context of APL, some

adolescents may find the environment playful and engaging, while others may feel burdened by time constraints or limited interest, resulting in varying experiences and levels of engagement. However, little is known about how adolescents perceive and experience these extracurricular programs especially APL. Most research in Bangladesh has focused on urban areas or early childhood education, leaving a significant gap in understanding rural adolescents' perspectives. Rural adolescents, in particular, face compounded challenges due to socioeconomic constraints and cultural norms (BBS, 2018; Jubair & Mehenaz, 2024). Although some studies have explored access, gender roles, and general impact, there is limited research on how adolescents perceive, experience, and express playfulness in extracurricular spaces like APL. Hence, this study aims to bridge that gap by exploring adolescents' experiences and perceptions towards Adolescent Play Lab, along with observing their playful behaviors.

1.2 Research Topic

Adolescents' perception on extracurricular spaces: A Comprehensive Exploration of Adolescent play lab. Adolescence is a dynamic journey of transformation, discovery, and self-expression. This study delves into how adolescents view extracurricular spaces specifically, the adolescent play lab. Exploring their experiences and perceptions of the APL can provide in-depth insights for the future. This study seeks to hear adolescents' voices and gain an overarching understanding of their perceptions and playfulness.

1.3 Statement of the Problem

The design and utilization of physical spaces play a significant role in shaping how adolescents engage with their learning environment. In Bangladesh, opportunities for extracurricular playful engagement are scarce, leaving many adolescents with limited opportunities. This is particularly concerning during adolescence, a phase marked by rapid changes for nurturing skills for the future. Research has long demonstrated that participation in clubs and extracurricular activities contributes positively to adolescent development (Eccles & Barber, 1999). Furthermore, Nastrom-Smith and Hughes (2019) also emphasize that flexible, adaptable spaces, such as multipurpose rooms or outdoor areas, not only support a variety of activities from sports to arts but also actively engage participants' creativity and playfulness. These kinds of environments are crucial for promoting exploration and informal learning, which in turn help develop essential social skills and emotional resilience. The Adolescent Play Lab (APL) of BRAC IED aims to create an encouraging, playful environment for adolescents to actively express their creativity and skills. However, understanding how adolescents actually feel and perceive this extracurricular space is of utmost crucial. If this place falls short of meeting adolescents' requirements and needs, or if it doesn't nurture a genuine sense of belonging, it could dampen their enthusiasm and limit positive outcomes. Given the powerful influence of physical environments, any shortcomings in APL might restrict adolescents' ability to engage freely and playfully, ultimately preventing them from fully benefiting from extracurricular opportunities. Therefore, this study aims to explore how adolescents' perceive and experiences within Adolescent Play Lab space. It seeks to deepen the understanding of how space design impacts extracurricular playful learning and their effects on adolescent experiences, playfulness, and perspectives.

1.4 Research Questions

This study aims to explore how adolescents experience and perceive extracurricular environments within the Adolescent Play Lab (APL), and how these experiences relate to their playful behaviors. It also considers whether and how the characteristics of the play-lab environment influence adolescents' levels of engagement, creativity, and sense of belonging. By exploring these aspects, the study seeks to generate insights that can inform the design of more supportive and engaging extracurricular spaces for adolescents. Guided by this objective, the research is framed by the following two questions:

1. What are adolescents experiences and perceptions toward the Adolescent Play Lab?
2. What variations in playful behaviors are observed in adolescents' play-lab?

1.5 Purpose of the Study

The purpose of this study is to explore adolescents' experiences, perceptions, and playful behaviors within the Adolescent Play Lab (APL). It aims to understand how adolescents engage with the APL, what meanings they associate with the space, and how their playfulness is expressed in this setting. The study also examines whether and how the APL supports or hinders creative expression, social interaction, and a sense of belonging. By exploring these dynamics, it seeks to provide insights into creating more engaging extracurricular spaces for adolescents that promote holistic development and offer guidance for effective play spaces.

1.6 Significance of the Study

This study on the Adolescent Play Lab is significant for a diverse group of stakeholders, including adolescents, schools, program implementers, educators, and policymakers. First and foremost, it amplifies adolescents' voices by capturing their perceptions, experiences, and preferences in extracurricular play spaces an area often overlooked in rural education research. By placing adolescents at the center of inquiry, the study provides a platform for their views to shape future program design and delivery. For schools and educators, the research offers insights into APL participants' engagement and feedback, shedding light on the potential for replicating or adapting similar play-based initiatives to support holistic student development. It also supports the organizing team, particularly BRAC IED in assessing the effectiveness of the APL and making informed decisions for future program improvements. From a policy and systems perspective, the study guides policymakers and educational planners in designing more inclusive, adolescent-responsive learning environments that incorporate play and emotional well-being into their frameworks. It also fills a significant knowledge gap by examining how adolescents experience extracurricular spaces, especially in rural and under-resourced settings like Cox's Bazar. The findings contribute to the growing field of adolescent development by informing the design of inclusive, creative, and contextually relevant programs that go beyond traditional academic models. Finally, the research lays a foundation for future studies on how spatial context influences adolescents' perception, playful behavior, and learning experiences. In doing so, it opens new pathways for interdisciplinary research at the intersection of education, play, and adolescent development in Bangladesh and similar contexts.

Chapter 2

Literature review and conceptual framework

2.1 Extracurricular activity and playfulness

Extracurricular activities play a crucial role in education by enriching students' lives in multiple ways. Through participation in these activities, students can develop talents, learn new skills, and enhance their overall learning experience beyond the classroom. According to Baker, M. A., & Mardell, B. (2015) extracurricular activities are emphasizing that they are activities performed by students that fall outside the realm of the normal curriculum of school education. These activities are generally voluntary, non-credit, and can include a variety of pursuits such as clubs, sports, and other recreational or educational engagements that supplement the educational program. This includes activities spanning multiple domains such as music, arts, sports, social events, and academics. It covers a broad range of experiences, including private lessons, clubs focused on school subjects, and various forms of sports and artistic endeavors. Donnelly, M., et al. (2023). The connection between extracurricular activities and playfulness is seen in how both support overall growth. Extracurriculars like sports, arts, and clubs offer structured spaces where playfulness can develop. This playfulness fosters creativity, problem-solving, and social skills, which are essential to many extracurricular activities. Together, they promote both personal and social development in adolescents. Kapur, R. (2020).

2.2 Adolescents and effects of extracurricular activities

Adolescence is a pivotal stage of development marked by profound physical, cognitive, and emotional changes. In today's world, however, adolescents face increasing demands. Academic expectations have intensified, with more challenging tests and mounting pressure to achieve high performance. The proliferation of technology and social media has further heightened these pressures by constantly demanding attention and reducing the time once reserved for leisure activities (Rideout, Foehr, & Roberts, 2010). Gunderson (2011) notes that many parents fill their adolescents' schedules with tutoring sessions and other enrichment programs. While such activities can be beneficial, they may also lead to feelings of overwhelm and burnout. Research indicates that engagement in extracurricular activities is positively linked to later success across multiple life domains, including career readiness, higher education, and civic involvement (Eccles & Lord, 1991; Eccles & Midgley, 1989). Extracurricular activities also provide adolescents with structured opportunities to interact with peers, fostering essential social competencies such as communication, teamwork, leadership, and conflict resolution. These settings enable young people to explore personal interests, cultivate hobbies, and identify passions, which support self-discovery and identity development (Eccles & Lord, 1991; Eccles & Midgley, 1989). Additionally, club participation can promote personal growth by enhancing confidence, resilience, and a sense of belonging (Larson, 2000). Eccles and Barber (1999) further emphasize that involvement in such activities positively influences adolescents' overall well-being and developmental outcomes. Other studies have also found that extracurricular engagement, particularly in after-school programs, enhances middle school students' motivation and engagement. Utilizing the Experience Sampling Method (ESM), it assessed students' subjective experiences during various activities, such as sports and arts enrichment. Results indicated that active participation in these extracurricular activities fostered higher levels of engagement and intrinsic motivation,

underscoring their role in promoting positive youth development. Shernoff and Vandell (2007) However, in a cross-sectional analysis it is found that adolescents who spent time in unstructured activities, like playing video games, non-school sports, or hanging out with friends, had more negative views of their school environment, skipped school more often, and had the lowest academic scores. On the other hand, adolescents who participated in a variety of activities, especially structured extracurricular activities had more positive views of their school environment, skipped school less often, and had the highest academic scores. Many youth participate in extracurricular activities, and research has linked activity participation with school engagement and academic success. A study involving 15,004 high school students from 28 schools across 11 states in the U.S. found that those engaged in extracurricular activities generally have more positive views on social-emotional security, support from adults and peers, and their overall connection to the school. McGowan, R. (2020). Extracurriculars play a crucial role in their holistic growth, encouraging playfulness, improving social skills, and boosting self-esteem, while also supporting academic success. These environments help adolescents explore their identities, shaping them into well-rounded individuals prepared for future challenges. Participation in activities like sports, arts, and community projects increases adolescents' engagement and motivation, offering more fulfillment than passive leisure activities like watching TV. These activities are key to emotional and social development, allowing teens to enjoy enriching experiences. Shernoff, D. J., J.(2008). Another study McNally, S. J. (2021) investigates how extracurricular activities affect the self-concept of adolescents aged 12 to 17 in Canada. It focuses on differences between immigrant and non-immigrant adolescents, highlighting the importance of providing equal access to extracurricular activities. The study finds that ECAs positively impact self-concept, mental health, and academic performance. However, immigrant adolescents are less likely to

participate in these activities compared to their non-immigrant peers, pointing to a disparity that needs to be addressed.

2.3 The effects of physical space on Adolescent

A well-designed physical space supports adolescents' developmental needs by promoting movement, collaboration, and self-discovery. Unlike traditional environments that may limit activity, Montessori settings foster engagement and physical activity, which are especially important for adolescents undergoing significant physical and emotional changes. Lovette, R. M. (2017). The influence of physical space on experience, especially in educational and developmental environments, can greatly affect how individuals interact, learn, and behave. This is particularly important for adolescents as they go through both social and personal development. Efficiently organized and well-designed educational spaces, incorporating elements such as lighting, air quality, and room layout, have been shown to significantly enhance academic achievement. The physical environment was found to account for up to 16% of the variation in student learning progress over the course of a year, underscoring the critical role that intentional space design plays in supporting effective learning. Barrett, P., Zhang, Y., Moffat, J., & Kobbacy, K. (2013) These spaces, when aligned with the curriculum, provide an engaging environment that enhances learning. A study conducted in Greece, Italy, and Sweden involved 723 secondary school students in playful, mission-based activities integrated into their everyday school life. The results indicated that participation in these project-based extracurricular activities led to high levels of student engagement. The study highlights how the students actively participated while considering their own limitations and constraints, demonstrating that integrating such interventions into schools' daily routines can be both feasible and impactful in enhancing student involvement. Mylonas, G., Hofstaetter, J., Friedl, A., & Giannakos, M. (2021, June). However, Barrett et al. (2015) conducted one study with

7 intervention and 7 control schools in Denmark where schools implemented a multicomponent environmental intervention aimed at increasing physical activity (PA) among adolescents. The study concluded that although the intervention made changes to the school environment, it did not produce strong evidence for an overall increase in physical activity among Danish adolescents. Toftager, M., Christiansen, L. B., Ersbøll, A. K., Kristensen, P. L., Due, P., & Troelsen, J. (2014). Another study indicates that participation in sports is more strongly linked to academic achievement in schools with low educational expectations and in poorer communities. On the other hand, involvement in non-sport extracurricular activities shows a more consistent positive impact on both academic performance and higher educational aspirations, regardless of the community type. This suggests that non-sport activities may offer broader academic benefits compared to sports, particularly in terms of raising educational expectations across different settings. Farb, A. F., & Matjasko, J. L. (2012)

2.4 Play and playful learning space for adolescent

The concept of "play" varies by age, with adolescents often using informal spaces, like "hang out" areas, which may not be viewed as traditional play. Play for adolescents often takes on different forms compared to younger children. Research shows a gap in understanding adolescent play compared to younger children (ages 5–12), emphasizing the need to recognize these informal spaces as valid environments for adolescent play that facilitate social interaction and self-expression. Additionally, the study suggests that engaging adolescents in research about play requires innovative approaches, merging creative and physical activities with digital tools to better capture their views and unique expressions of playfulness. Martin, M., Jelić, A., & Tvedebrink, T. D. O. (2023). According to Hakkarainen, K., & Munter, J. (2012), playful learning environment can be defined as an innovative space, both indoors and outdoors, enriched with technology, where learning happens through creative play and physical games.

It emphasizes active participation, combining mental, hands-on, and physical activities. This includes technology-based tools and encourages designing games and activities for the playground. The term "playful" reflects both the learning approach and the engagement style, allowing for creative and engaging experiences in a tech-enhanced setting. Therefore, designing an environment that encourages adolescent play within structured activities allows adolescents to have a more fulfilling and enjoyable experience during their formative years. This combination not only facilitates their immediate growth but also establishes a strong foundation for lifelong learning and personal development. Kangas, M. (2010). Playful learning involves learning activities that are rooted in play and physical games. It promotes movement and physical engagement, encouraging learners to be active and physically involved in the learning process. By designing curriculum-based play and game content, children can create and reshape their understanding, allowing for meaningful engagement in learning. Playful learning environments are expected to lead to various outcomes, including improvements in academics, critical thinking, physical abilities, participation, media literacy, and knowledge co-creation, where children actively contribute to building knowledge together. Kangas, M. (2010).

2.5 Playful behavior of adolescent children

Adolescent play takes many forms, from structured activities like sports and organized games to unstructured play such as socializing, pursuing hobbies, or engaging in creative projects. These activities are more than just fun they help adolescents build social skills, develop teamwork, and nurture their creativity (Brown, 2010). Play also serves as an important emotional outlet, helping young people manage stress and support their mental well-being (Lindsey & O'Conner, 2018). At its core, playfulness in adolescence is about creativity, spontaneity, and joy. Whether they are making up games, acting out stories, or simply engaging in playful conversations, these moments allow adolescents to express themselves and

strengthen their social bonds (Barnett, 2005). Play also pushes them to explore, take risks, and try new forms of self-expression key steps in shaping their identity and personal growth (Diener et al., 1999). For many adolescents, play is also a physical experience. Whether it's running, dancing, or just engaging in free movement, these activities not only support physical health but also provide a sense of freedom and connection with others (Natvig et al., 2003). Play, in all its forms, is an essential part of growing up, offering opportunities for learning, self-discovery, and emotional resilience. Staempfli (2007) suggests that playful adolescents tend to display characteristics like increased self-confidence and a more positive attitude toward physical health, which can help build resilience against stress. The study revealed that, although playful teens do not experience stress more frequently than their less playful peers. Additionally, playfulness is linked to higher involvement in leisure activities, leading to greater satisfaction in these experiences. This underscores the indirect influence of playfulness on psychological well-being by enriching leisure engagement.

2.6 Adolescents perception towards extracurricular activity

Adolescents generally view extracurricular activities, especially those with playful elements like sports or arts, as enjoyable and beneficial. They appreciate the chance to engage in less structured settings compared to academics, which helps with personal growth and social interaction. Research indicates that participation in extracurricular activities can enhance adolescents' self-esteem, strengthen social skills, and foster a sense of belonging (Eccles & Barber, 1999). For many, such activities provide opportunities to explore interests beyond the academic curriculum, develop leadership abilities, and form meaningful relationships with peers who share similar passions (Larson, 2000). Studies also reveal a positive link between extracurricular involvement and academic performance, particularly in areas such as motivation and engagement (Fredricks, Blumenfeld, & Paris, 2004). Moreover, evidence

suggests that participation in creative programs, including arts-based activities, is associated with higher levels of self-esteem, confidence, and social connectedness (Davis & Garcia, 2018; Miller & Thomas, 2021). These programs are often perceived by adolescents as both enjoyable and meaningful, contributing to their overall well-being (Johnson & Lee, 2017). Adolescents' attitudes and perceptions toward extracurricular activities are influenced by multiple factors, including peer relationships, personal interests, and parental encouragement. Chen and Wang (2018) found that creative clubs are often viewed as spaces for self-expression, social interaction, and personal growth. However, competing schedules, academic demands, and limited awareness of the benefits of such clubs can hinder active participation. Understanding adolescents' perspectives is therefore essential in identifying their motivations and the barriers they face in engaging with extracurricular activities. Eccles (1983) emphasizes the role of individual personality traits—such as intrinsic motivation and self-efficacy—in shaping these perceptions, while other studies highlight the influence of socioeconomic background, family support, and peer networks (Fredricks et al., 2004; McPherson & Zimmerman, 2007). According to Shernoff, D. J., & Vandell, D. L. (2007) Adolescents generally have positive perceptions of after-school programs, appreciating the range of benefits they offer. These programs tend to boost their emotional well-being, with participants often expressing happiness, excitement, and satisfaction during activities. This contrasts with feelings of boredom or loneliness they may experience without structured activities. After-school programs provide a refreshing break from unstructured time and create a more uplifting atmosphere. Adolescents also report higher intrinsic motivation, enjoying and focusing more on these activities. Additionally, the opportunity for social interaction is a key aspect they value in their after-school experience.

2.7 Barriers to join extracurricular activities

One study by Hultsman, W. Z. (1992) investigates why early adolescents (grades 5–8) in a southwestern U.S. Area either does not join or drop out of recreational school activities in which they are interested. The study highlights barriers perceived by adolescents, emphasizing differences from the constraints reported by adults. Adolescents often cited time constraints due to academic pressures, a lack of interest in available activities, self-confidence issues, and peer influence as major factors deterring their participation. Additionally, parental attitudes significantly affected their involvement. In a separate study, Sanderson and Richards (2010) surveyed 416 pre-adolescents and young adolescents to identify various barriers hindering participation in after-school extracurricular activities. These barriers can be classified into safety concerns, family obligations, transportation difficulties, and a lack of awareness regarding available programs. To effectively address these issues, it is essential to engage the community and develop programs tailored to the specific challenges encountered by adolescents and their families.

2.8 Play lab and its impact

Play Labs are community-based early learning centers established by BRAC in collaboration with the LEGO Foundation. According to BRAC USA (2021), These centers cater to children aged 3 to 5 in low-resource environments, offering culturally tailored, play-based curricula that foster cognitive, linguistic, physical, and socio-emotional growth. A two-year study led by researchers from the University of Cambridge and Columbia University assessed the effectiveness of BRAC's Play Lab model in Bangladesh. The findings indicated that the intervention successfully prepared children for formal schooling, bridging the developmental gap between initially lower- and higher-performing students. Initially launched in Bangladesh, the Play Lab model has expanded to several countries, including Tanzania and Uganda,

operating a total of 656 centers and reaching approximately 11,500 children daily. In humanitarian contexts, such as the Rohingya refugee camps in Cox's Bazar, Bangladesh, BRAC has adapted the model into Humanitarian Play Labs. These specialized centers provide psychosocial support and early learning opportunities to children affected by crisis, addressing trauma and promoting resilience. A two-year study in Bangladesh found that children attending Play Labs surpassed their peers in communication, motor skills, problem-solving, and social abilities (BRAC USA, 2021). This approach has effectively reduced learning disparities and better prepared children for primary education (BRAC USA, 2021). In humanitarian settings like the Rohingya refugee camps, the Humanitarian Play Lab model has been effective in enhancing socio-emotional and cognitive development while offering psychosocial support (Mariam et al., 2021). Additionally, the Play Lab model has positively influenced parental engagement and community participation in early childhood education (BRAC USA, 2021).

2.9 Adolescent play lab and it's functions

Play Labs provide joyful, play based early learning experiences for children aged three to five. Through play, children not only learn but also grow emotionally and socially. These labs feature colorful, engaging spaces, skilled facilitators, and a deep appreciation for local culture, all built around a proven curriculum. This combination helps ensure that every child receives the strong educational foundation they need to thrive in their early years (BRAC Play Labs, 2017). In 2022, BRAC IED and BYP collaboratively introduced a high school intervention program titled BRAC Creative Club. This initiative aimed to equip adolescents with 21st-century skills through play-based and experiential learning approaches (BRAC Youth Platform, 2024). Building on this foundation, in 2024, BRAC IED launched a playful extracurricular initiative called the “Adolescent Play Lab (APL).” This program is designed to promote both physical and emotional wellness among adolescents. The initiative was deployed

in rural Cox's Bazar, Bangladesh, and represents an innovative approach to adolescent development through playful, inclusive, and extracurricular activities. APL creates a dedicated environment that encourages active participation in creative and playful activities, fostering emotional growth, social interaction, and personal development. It supports adolescents in understanding and managing their emotions, creative skills and encourages pro-environmental behavior to build resilience to climate change. It focuses on providing a safe and non-judgmental space to promotes adolescents' holistic development and well-being. A key aspect of the Play Lab is the role of facilitators, known as *Bondhu Apa*, who are trained in psychosocial support and the in-depth facilitation of the curriculum. This training enables them to be empathetic and responsive to the diverse challenges adolescents face. Another significant feature of APL is that it operates within two types of school spaces: shared spaces classrooms where regular academic and play-lab activities are integrated. And individual playlab spaces dedicated rooms used exclusively for APL activities. The selection of space type is based on school management decisions and classroom availability. While both spaces include similar flexible and movable furnishings, individual play-lab spaces generally offer more room, greater accessibility, and resources tailored specifically to adolescents' needs. Adolescents can access shared spaces during school hours when not otherwise in use, whereas individual play-lab spaces are available only during scheduled session times. These spatial distinctions may have an impact on adolescents' perceptions of the APL or might not affect their overall experience. The design and setup of play spaces play a crucial role in shaping in how one actively engage in that place. According to Martensson et al. (2013), adolescents are more likely to participate in physical activities when they feel comfortable and connected to their environment. Poorly designed spaces, on the other hand, can lead to exclusion or discourage involvement particularly among girls who may be less inclined to join competitive sports. Safe, well-maintained, and easily accessible environments promote active engagement, whereas unsafe or

inaccessible spaces can result in sedentary behavior due to a lack of motivation. Additionally, Maria Montessori emphasized that the physical environment is essential for child development and profoundly shapes learning experiences (Migliani, 2021). Therefore, this study focuses on exploring adolescents' perspectives on the Adolescent Play Lab and will observe their playful behaviors within these varied spatial contexts.

2.10 Findings from Literature review and conceptual framework

Extracurricular activities, such as sports, creative arts, and community projects, play a significant role in fostering playfulness among adolescents. Play during adolescence is not only crucial for personal enjoyment but also for holistic development, particularly in areas like emotional well-being, self-concept, and social skills. Studies suggest that adolescents engaged in creative and play-based activities, such as arts and crafts, experience higher levels of self-esteem, confidence, and social connectedness. The design and accessibility of physical spaces play a vital role in influencing adolescents' participation in extracurricular activities. Well-designed, inclusive spaces encourage greater engagement, while poorly designed or unsafe spaces may deter participation, affecting adolescents' ability to interact with peers, explore, and relieve stress. European studies show how physical environmental changes affect adolescent engagement, often shaped by socioeconomic and family factors (Inchley et al., 2018). A study in Canada highlighted that immigrant adolescents participated less frequently in extracurricular activities compared to their non-immigrant peers, revealing a disparity that requires attention. Similarly, a study conducted across Greece, Italy, and Sweden found that mission-based extracurricular activities, when integrated into everyday school life, led to high student engagement despite some limitations. However, a Danish study that focused on improving physical activity by altering school environments found limited success in increasing physical activity levels among adolescents. Factors such as socioeconomic and demographic

background, family support, and peer influence also play a crucial role in determining adolescents' participation in extracurricular activities. In addition, understanding adolescents' own perspectives is essential. Most studies indicate that adolescents view after-school programs positively, noting improvements in emotional well-being, motivation, and social interaction. These programs provide a structured alternative to unstructured time, promoting happiness and engagement. However, there are many barriers to extracurricular participation, including socioeconomic status, family responsibilities, safety concerns, transportation issues, and limited awareness of available programs (Sanderson & Richards, 2010). Additionally, research highlights disparities in access to extracurricular activities, particularly among immigrant adolescents compared to their non-immigrant peers, indicating the need for more inclusive programming (McNally, 2021).

In Bangladesh, the BRAC Institute of Educational Development (BRAC IED) introduced the Adolescent Play Lab (APL) as a structured, play-based extracurricular initiative to support adolescents' emotional and social development. Implemented across multiple schools in Cox's Bazar, APL provides adolescents with a creative space for expression, connection, and playful learning. However, little is currently known about how adolescents themselves perceive and experience this initiative. Existing research in Bangladesh tends to focus either on early childhood programs or urban youth, leaving a significant gap in understanding the lived experiences of rural adolescents participating in extracurricular activities like APL. This study seeks to address that gap by exploring adolescents' experiences, perceptions, and playful behaviors within the Adolescent Play Lab. It focuses on understanding how adolescents engage with and interpret the APL experience as a whole and aims to observe how different expressions of playfulness emerge in these environments. By investigating these elements, the study contributes to a deeper understanding of how extracurricular initiatives can support adolescent development and well-being in rural, low-resource contexts.

2.11 Conceptual Framework

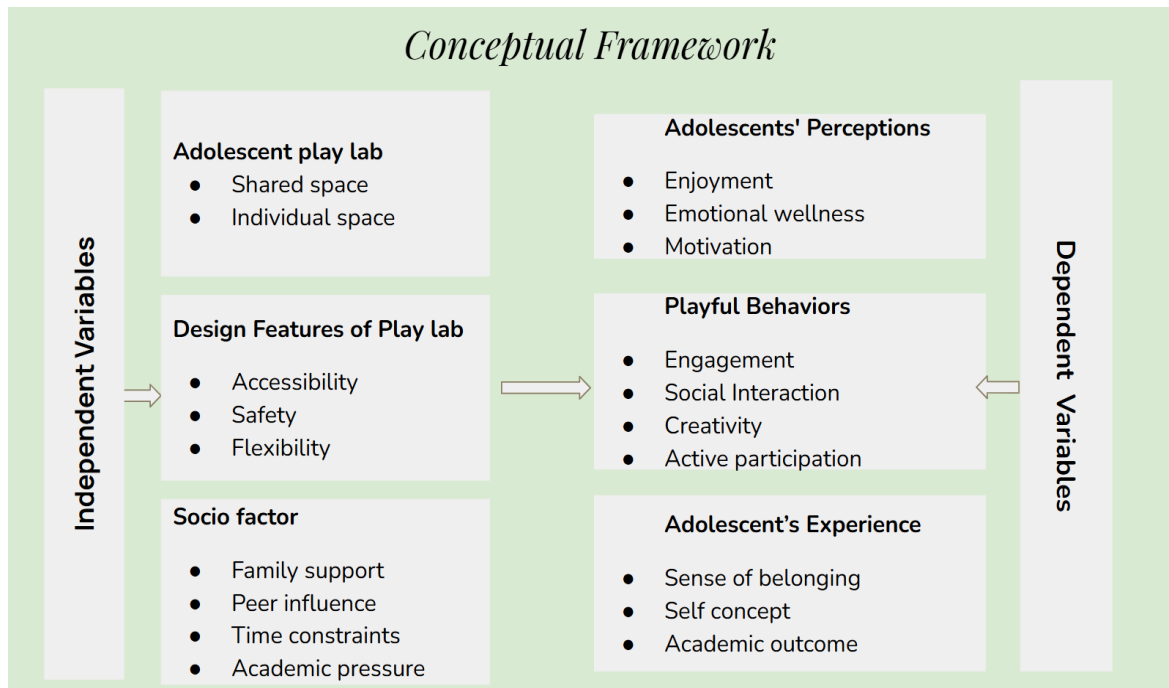


Figure 1

Based on the literature reviewed, the conceptual framework of this study is designed to explore how adolescents' perceptions, experiences, and playful behaviors are shaped within the Adolescent Play Lab (APL), an extracurricular initiative implemented in rural Bangladesh. This framework consists of independent variables factors believed to influence adolescents' experiences in the APL including: The type of play space (shared or individual), The design features of the APL (accessibility, safety, flexibility), and Relevant socio-contextual factors (family support, peer influence, time constraints, academic pressure). On the other hand, the dependent variables include adolescents' perceptions (enjoyment, emotional wellness, motivation), their playful behaviors (engagement, creativity, social interaction, active participation), and broad experiential reflects such as sense of belonging, self-concept, and academic confidence. The arrows in the diagram illustrate that these contextual and structural factors may influence how adolescents perceive the APL, how they behave playfully within it, and what kinds of experiences they take away from it.

Chapter 3

Methodology

3.1 Research approach

This study utilizes a convergent mixed-methods approach, which, according to Creswell and Plano Clark (2018), allows for a comprehensive understanding of a phenomenon by combining both qualitative and quantitative data. This design enables a deeper exploration of the relationship between extracurricular space, adolescents' experiences, and their playful behaviors. Qualitative methods provide rich, descriptive insights into adolescents' perceptions and lived experiences, while quantitative methods help identify patterns and trends in playful behaviors and engagement levels. Following Creswell's convergent parallel design, this study collects both qualitative and quantitative data simultaneously, analyzes them independently, and then integrates the findings to draw comprehensive conclusions. This integrated approach supports a holistic understanding of how adolescents perceive and engage with the Adolescent Play Lab (APL). Here, quantitative data is collected through semi structured surveys featuring Likert-scale questions. These surveys provide measurable insights into adolescents' views on space, participation, and their experiences of playfulness. On the other hand, qualitative data is gathered through naturalistic observation and Focus Group Discussions (FGDs). The researcher observes adolescents' participation and playful behaviors across different APL of Teknaf and Ukhiya; to contextualized insights into how adolescents interact with their environment. With informed consent and ethical approval, photographs are also taken to document adolescents' involvement and expressions of playfulness, further enriching the observational data. FGDs are conducted in a relaxed, familiar, and comfortable setting within

the APL space to encourage open and honest sharing. The discussions follow a semi-structured format guided by open-ended questions, designed to explore adolescents' experiences, perceptions, and expressions of playfulness in depth. Through triangulation of data sources, the mixed-methods design enhances the validity, depth, and reliability of the findings and provides nuanced insights into how adolescents engage with extracurricular environments like the APL.

3.2 Research site

This study takes place in four government schools located in two upazilas of Cox's Bazar district Ukhiya and Teknaf. The socio-economic and demographic conditions of Cox's Bazar, particularly in Ukhiya and Teknaf, have been significantly impacted by the arrival of Rohingya refugees since 2017. The randomly selected schools host sessions of the Adolescent Play Lab (APL) and serve adolescent girls and boys from middle-to low income rural communities, providing a comparable socioeconomic background for the study. Two secondary schools from each upazila was selected in this research based on operational feasibility. In one school from each upazila, APL sessions take place in a shared multipurpose classroom, while the other has a dedicated space exclusively for APL activities. The school authorities allocate these spaces based on their willingness and the availability of classrooms. Each school is established to meet the educational needs of the local population but faces challenges such as limited resources and overcrowded classrooms. On average, these schools enroll between 200 to 350 students in secondary classrooms, particularly in class six, with a teacher to student ratio that may not always support optimal learning experiences. Given these conditions, these schools provide a valuable setting for exploring adolescents' perceptions of extracurricular interventions in rural area of Cox's Bazar.

3.3 Research Participants

The target population for this study is adolescents in Cox's Bazar, specifically those who participate in the Adolescent Play Lab (APL) sessions. The research participants comprise Bangladeshi adolescent boys and girls from class six, aged approximately 11 to 13 years. These students are selected from four government secondary schools located in the Ukhiya and Teknaf upazilas of Cox's Bazar. They live in middle- to low-income rural communities, ensuring a comparable socioeconomic background. The selection of participants is purposeful, focusing on adolescents involved in APL sessions, as their participation is central to exploring their perceptions and behaviors in the extracurricular space of APL.

3.4 Sampling procedure

As this study adopts a convergent mixed-methods approach, a combination of purposeful and purposive random sampling techniques was employed to comprehensively explore adolescents' perceptions and the influence of extracurricular space on their experiences and playful behaviors. Four government secondary schools were randomly selected which represents rural, middle- to low-income communities, providing a relatively homogeneous socioeconomic context. For the quantitative phase, a purposive random sampling technique was applied to select participants for the Likert-scale survey. The sampling aimed for gender balance, with efforts made to include both boys and girls equally. However, in some instances, attendance variations among adolescents led to an uneven gender distribution. In the qualitative phase, two sampling techniques were used. For observations, purposeful sampling was conducted, involving all adolescents participating in APL on that day. This allowed for detailed documentation of behaviors, interactions, and expressions across various play settings.

Also, for Focus Group Discussions (FGDs), a purposive random sampling method was utilized. These semi-structured discussions were designed to elicit deeper insights into adolescents' experiences, feelings of belonging, and perceptions of the APL environment. This multi-layered sampling approach supports the study's goal of generating both breadth and depth in understanding adolescent engagement in shared extracurricular play spaces.

3.5 Data Collection Methods

This study employs a mixed-methods approach, following Creswell's convergent design, where qualitative and quantitative data are collected simultaneously. The primary data collection methods include focus group discussions (FGDs), observations, and surveys, providing a comprehensive understanding of how adolescents perceive and interact with different spaces in BRAC's Adolescent Play Lab (APL).

Qualitative Data Collection:

For the qualitative component, the researcher observes APL sessions and conducts FGDs to gain a deeper understanding of adolescents' experiences in different APL environments.

Observations: The researcher observes five APL sessions, each lasting sixty minutes, in four schools across Teknaf and Ukhiya, focusing on capturing the nuances of adolescent behavior, playful activities, and interactions. To document detailed insights, extensive field notes are taken during and after each session. The researcher focuses on adolescents' behavior, interactions, environmental details, and direct speech from participants. Additionally, photographs are taken to visually document adolescents' playful behaviors in different spatial settings. However, the researcher remains highly mindful to ensure that capturing images does not disrupt the natural flow of engagement.

Focus Group Discussions (FGDs): The researcher conducted two FGDs with randomly selected adolescents from two upazilas. According to Creswell, FGDs provide deep insights into participants' experiences and help explore complex social dynamics through group interactions (Creswell & Poth, 2018). They also highlight that FGDs can reveal data beyond individual interviews, as participants reflect on each other's thoughts, leading to fresh insights and a richer understanding of shared experiences. In this study, discussions with adolescents are semi-structured, using open-ended questions to explore their perceptions of the play lab, their engagement, and how the space influences their creativity and social interactions. The FGDs are conducted in a comfortable, informal setting, encouraging open and collective reflection, which reveals deeper insights. The discussions are audio-recorded with consent to ensure detailed documentation of all verbal exchanges. Additionally, the researcher takes notes on key points, capturing contextual nuances and non-verbal expressions, further enriching the data.

Quantitative Data Collection – Survey : For the quantitative component, a semi-structured survey with Likert-scale questions is developed and administered to adolescents from four schools. It is conducted with a randomly selected group of adolescents who participate in APL sessions in Ukhiya and Teknaf upazilas. The questionnaires are written in simple Bangla, ensuring they are easily understandable by adolescents. A total of thirty four survey questionnaires have been completed by adolescents. This survey aims to gather responses from a statistically significant number of students, helping identify trends in their engagement and overall perceptions. By combining qualitative and quantitative methods, this study triangulates data from FGDs, observations, and surveys to provide a holistic understanding of adolescents' perspectives and playful behaviors in different play lab contexts.

3.6 Role of the Researcher

As someone working with BRAC IED, my role in this study is very crucial. I've been part of designing BRAC's Creative Club's curriculum back in 2022, which later evolved into the Adolescent Play-Lab (APL). Although most aspects of the curriculum changed during the transition from the BRAC Creative Club (BCC) to the Adolescent Play Lab (APL), and I was not actively involved in this transition, there is still a chance of bias. However, this background gave me a deep understanding of the program, but it also meant I had to be extra careful to stay neutral. My connection to BRAC helped me navigate in schools and permitted me to conduct the study smoothly with verbal consent. However, I didn't want my familiarity with the program to sway the results, so I tried to be extra concern and approached this research with curiosity, not personal assumptions. Throughout the study, I tried to be mindful and ensuring that the voices of adolescents are heard and represented authentically. During Focus Group Discussions (FGDs), I guide conversations in an open and comfortable manner, ensuring that adolescents feel safe to share their real thoughts, feelings, and perspectives on their play spaces. Similarly, when administering Likert-scale surveys, I ensure that questions are clear and accessible, encouraging honest and thoughtful responses. Throughout this study, I take on multiple roles facilitator, observer, and data collector. During session observations of APL, I strive to remain as less visible, less distracting and allowing adolescents to engage naturally in their environment. My aim was to capture their spontaneous expressions, interactions, and playful behaviors without disrupting. I recognize the ethical responsibilities of my role and I continuously remain mindful of potential biases. This means being critical and reflective throughout the process questioning my interpretations, maintaining objectivity, and ensuring that adolescents' voices shape this study rather than mine. I also take care to uphold ethical research practices, including obtaining informed consent, ensuring confidentiality, and respecting the privacy and comfort of all participants. I believe my prior fieldwork experience,

expertise and involvement with children supports my objective stance throughout the study. Furthermore, I seek feedback and validation from colleagues, peers and other experts in the field of research to cross-check findings and interpretations throughout the study, thereby enhancing the credibility and reliability of the study.

3.7 Data Analysis

This study employed a convergent mixed-methods design to explore adolescents' perceptions and experiences in the Adolescent Play Lab (APL), and to explore their playful behaviors. Quantitative and qualitative data were collected in parallel through surveys, observations, and focus group discussions (FGDs), and then analyzed separately. The findings were integrated to identify key patterns and themes in adolescents' perspectives and behaviors within the APL context.

Quantitative data- Survey data analysis:

The survey responses in this study were analyzed using descriptive statistics. A Likert scale was used to measure adolescents' perceptions of the play lab, its environment, their sense of ownership, and their playfulness. The collected data were entered and analyzed using Microsoft Excel. Descriptive analysis was conducted to represent the survey data, utilizing visual representations such as pie charts and bar charts. Each pie chart illustrates the distribution of responses to a single survey question, summarizing and describing individual survey results using percentages. Additionally, the demographic data of all participants are presented based on their gender.

Qualitative data-FGD analysis :

In this study, focus group discussions were conducted to gain deeper insights into adolescents' experiences and preferences regarding the Play Lab. The discussions were transcribed, coded, and analyzed thematically to identify key patterns. During the analysis,

the focus was on themes such as what adolescents enjoyed most about the Play Lab, how they spent their time there, whether they liked or disliked certain aspects, whether they experienced any restrictions, and what activities they found most engaging. Their recurring thoughts and perspectives helped build a comprehensive understanding of their experiences, interactions, and how they perceive the Adolescent Play Lab.

Qualitative data- Observational analysis:

The observational data from this study were analyzed qualitatively using thematic analysis. Field notes and photographic evidence were reviewed to identify recurring patterns of behavior, engagement levels, and social interactions among adolescents. Observations focused on how they interacted with one another, their levels of participation, engagement with APL materials, and the emotions they expressed during play, such as joy, excitement, frustration, or curiosity. Finally, to ensure a comprehensive analysis, data from surveys, observations, and FGDs were compared using a triangulation approach. This allowed for the identification of common themes while also recognizing any differences. By examining various sources of information together, a clearer and more detailed understanding of adolescents' experiences and perspectives in the Play Lab emerged.

3.8 Ethical Issues and Concerns

This study rigorously upheld ethical standards, ensures to maintain well-being, and privacy of all adolescent participants. Informed verbal consent was obtained from both school and adolescent participants of APL. The purpose of the study was clearly explained to both school authorities, facilitators (Bondhu Apa) and adolescent participants, giving them the option to participate or withdraw at any time without consequences. Confidentiality was a top priority, with no identifying information shared in any document. Any images were used solely for

analysis, while capturing the images I tried to hide adolescent's identity, as participants' privacy was strictly protected. All data was securely stored, and access was limited to those directly involved in the study. Throughout the research process, I maintained a non-judgmental and respectful attitude, ensuring that adolescents' voices and perspectives were accurately represented in the findings. In focus group discussions and observations, I took extra care to create a comfortable environment, where participants felt free to express their thoughts. As a researcher affiliated with BRAC IED, I was mindful of potential biases and took reflective notes to remain objective and allow the participants' perspectives to shape the study's outcomes. This study also aimed to maximize benefits and minimize risks for participants. By analyzing their experiences and interactions in the play lab, the findings will contribute to improving the design and implementation of adolescent play spaces, enhancing their overall experience and engagement.

3.9 Credibility and Rigor

To ensure the findings of this study are trustworthy, I followed key principles of both qualitative and quantitative research rigor such as credibility, dependability, confirmability, and transferability. My previous experience working with adolescents, along with regular reflection on my role, helped me stay aware, honest, and fair throughout the research process. These practices added both reliability and depth to the study. Between 2020 and 2022, I was actively involved in different research and workshop initiatives with adolescents in Bangladesh, including in Rohingya communities. During that time, I conducted focus group discussions and other studies aimed at understanding adolescents' daily lives, needs, and aspirations. This experience gave me valuable insights into adolescent behaviors, cultural contexts, and ethical challenges in vulnerable settings. It also strengthened my confidence and deepened my interest in working with adolescents, especially in creative and playful learning

spaces. This background made me more conscious of my role as a researcher and the possibility of bias. I took a reflective approach to the research process, consistently thinking about my own assumptions and staying transparent in my methods. To reduce bias, I made sure to document everything carefully and cross-check findings from different sources. I developed a detailed literature matrix and conceptual framework to clearly link the study's objectives with its methods, including surveys, FGDs, and observations. This framework guided both tool development and data analysis. The research proposal was revised multiple times with support from academic supervisors to ensure clarity, focus, and ethical soundness. Ethical practices were strictly followed, including getting proper permission from school authorities and informed consent from adolescents. The credibility of the study was further strengthened by the use of multiple methods, spending time in the field, and staying mindful of my influence as a researcher. Finally, to ensure well-rounded findings, I used triangulation comparing survey data with FGD responses and observational notes. This helped validate the results and provided a fuller, more accurate picture of adolescents' experiences and perceptions in the Adolescent Play Lab.

3.10 Limitations of the study

This study faced several limitations that influenced both the research process and the interpretation of findings. Firstly, clashes with the academic calendar of government secondary schools posed significant challenges. Periods allocated for examinations, religious holidays (such as Eid and Puja), annual school events reduced adolescents' availability, thereby limiting opportunities for data collection. High rates of student absenteeism, especially during school annual programs also resulted limited data collection opportunities which may limit the generalizability of the findings. Another limitation was that Focus Group Discussions (FGDs) were conducted only in individual APL settings, whereas surveys and observations were

conducted in both shared and individual APLs. As a result, the qualitative data may not fully reflect the perspectives of adolescents using shared play spaces, potentially skewing spatial comparisons. Another notable limitation was the gender imbalance in participation. Fewer boys attended APL sessions compared to girls during data collection. Although the underlying reasons remain unclear, this disparity may have influenced the diversity and representativeness of perspectives captured in both the qualitative and quantitative data. The researcher's presence during observation sessions may also have unintentionally affected adolescents' natural behavior, despite efforts to minimize reactivity. In addition, some adolescents may have provided socially desirable responses during FGDs or random answers in the survey, rather than expressing their genuine thoughts and experiences. To mitigate this, the researcher created a safe, relaxed environment, emphasized confidentiality, and clearly communicated the study's purpose to encourage honest participation. Minor challenges in interpreting the local dialect during FGD transcription also emerged. Although the researcher was familiar with the regional tone and language, certain nuances may have been lost, potentially affecting the depth of qualitative analysis. Finally, since the study was conducted in only four government schools in Ukhiya and Teknaf upazilas of Cox's Bazar, the findings may not be fully generalizable to adolescents in other geographic regions or educational settings. Recognizing these limitations is essential for contextualizing the results and guiding future research. Future studies should consider broader sampling across diverse locations, flexible data collection scheduling around academic calendars, and strategies to minimize observer influence and ensure gender-balanced participation.

Chapter4

Results

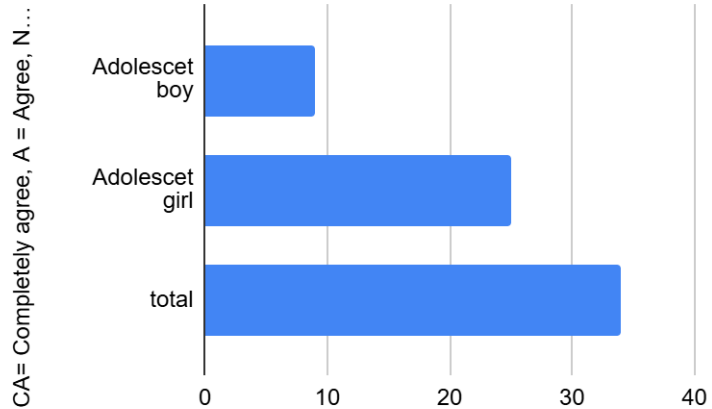
4.1 Introduction

The findings indicate that adolescents generally perceive the Adolescent Play Lab (APL) as a positive, playful, and supportive space. Both the quantitative survey data and qualitative insights from focus group discussions and observations align in highlighting adolescents' active participation and enjoyment across various activities. However, some important nuances emerged. While most adolescents report feeling welcomed and encouraged to participate often with flexible options some also expressed occasional boredom. This may suggest a mismatch between individual preferences and the activities offered, indicating the need for more varied and dynamic options. It may also reflect natural fluctuations in adolescent engagement influenced by mood, social dynamics, or daily routines. In addition, adolescents identified areas for improvement, particularly related to space arrangement, storage limitations, and group dynamics. These challenges were more clearly surfaced in the qualitative data, offering valuable context beyond what the survey results alone could capture. Gender dynamics also presented a notable pattern. Although fewer boys took part in APL activities, those who did were highly engaged and enthusiastic. This trend was observed across all data sources and suggests that boys may face social or cultural barriers to participation. Yet, once these are overcome, the environment proves highly engaging. Addressing these barriers while maintaining the qualities that make APL enjoyable will be essential to foster more inclusive participation.

Below are some findings from the qualitative and quantitative data.

4.2 Quantitative Approach

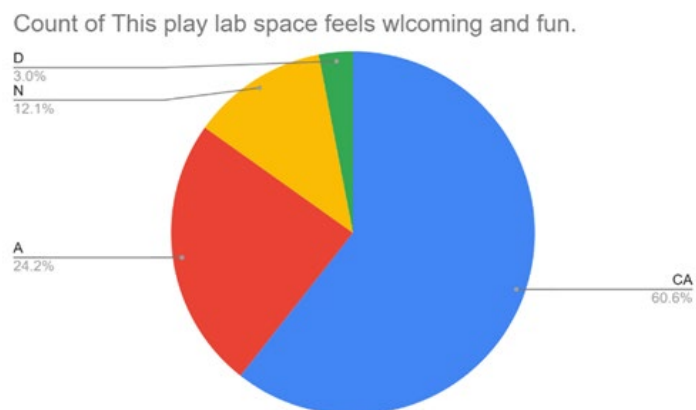
In total, thirty-four adolescents from four Play Labs participated in the survey, which included a Likert scale, one emotion-checking question, and one open-ended question. The results of the quantitative analysis did not vary significantly, except for some notable differences in adolescents' perceptions and experiences.



However, a total of 34 adolescents *Figure 2*

participated in the study, (Figure-2) of whom 25 were girls and 9 were boys. This reflects a significantly higher female participation and a glimpse of overall attendance rate of APL during the data collection period.

Some responses of other statements are showing below: The responses to the statement, "This play lab space feels welcoming and fun," (Figure 3) show a predominantly positive perception of the Play Lab,



with 60.6% of respondents indicating "Completely Agree" (CA), suggesting that the space is highly appreciated by most. An *Figure 3*

additional 24.2% "Agree" (A), further reinforcing the overall positive sentiment. However, there are also a few respondents who do not share this view. A small group, 3.0%, "Disagree" (D), implying that for a few, the space may not feel welcoming or fun. Furthermore, 12.1% of participants remained "Neutral" (N), signaling ambivalence or a lack of strong feelings about

the space. Although the majority view the space positively, the presence of a small proportion of negative and neutral responses suggests that the space may not appeal to everyone equally.

This creates scope for further consideration of how to ensure the space is universally welcoming and enjoyable for all adolescents.

Also, in the responses to the statement, "No one bothers me while I enjoy activities in APL."

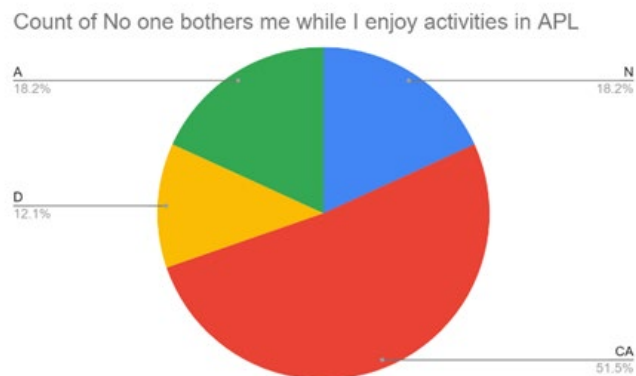


Figure 4

(Figure 4) a significant majority, 51.5%, "Completely Agree" (CA), suggesting that most people feel undisturbed while engaging in activities in this space. Conversely, the data indicates that not all respondents share this sentiment. A portion (12.1%) expressed disagreement, reporting that they do experience disturbances during activities, a point of concern. Furthermore, 18.2% of responses were neutral, reflecting an absence of strong conviction. Although positive responses predominate, the reported instances of individuals feeling bothered suggest a need to address potential disruptions within the APL space.

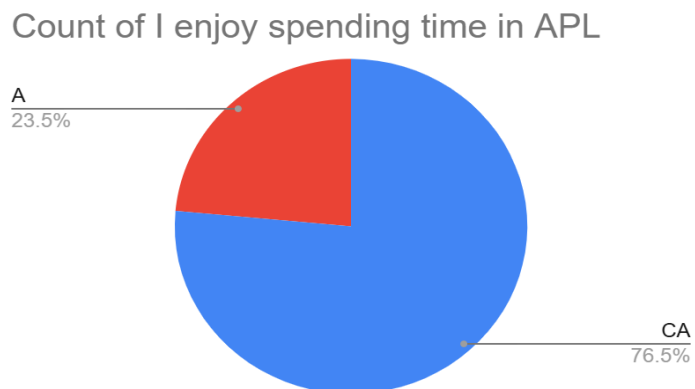


Figure 5

The survey also included questions about how adolescents

spend their time and engage in activities at the Play Lab," (Figure 5), as well as their feelings about it. All respondents expressed positive sentiments, with 76.5% of them

completely agreeing that they enjoy their time in the APL. The remaining participants also expressed positive views, further reinforcing the overall enjoyment of the space.

However, in responses to the statement, "Sometimes I feel tired and bored coming to APL"

(Figure 6) A plurality of respondents,

38.2%, indicated disagreement (D)

with the statement. On the other

hand, a notable proportion, 29.4%,

agreed (A) with the statement, and a

further 14.7% expressed strong

agreement (CA). This indicates that,

despite the largest group disagreeing, a

substantial minority does report

feelings of tiredness and boredom

upon coming to APL. It shows

mixed feelings about tiredness and

boredom in APL. Most

participants do not report these

issues, but a notable portion agrees

or strongly agrees, indicating that

Count of Sometimes I feel tired and bored coming to APL.

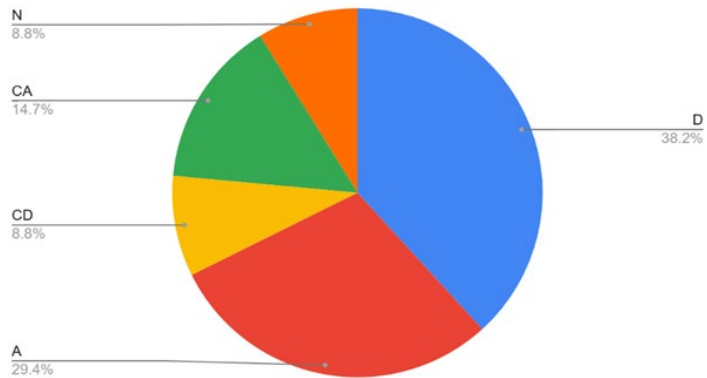


Figure 6

Count of I feel encouraged to try new and playful activities in this space.

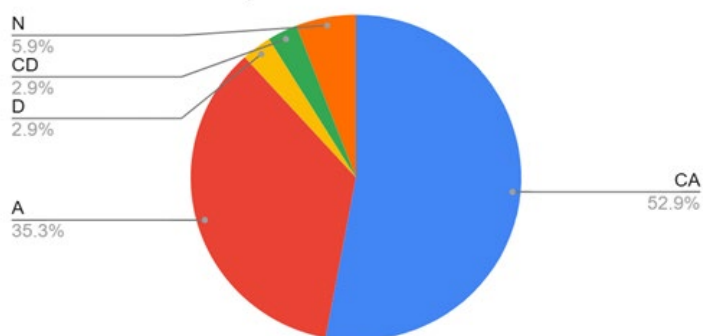


Figure 7

these concerns affect some individuals. This highlights the need for further study to identify

the causes and explore ways to improve engagement. The small percentage of neutral and

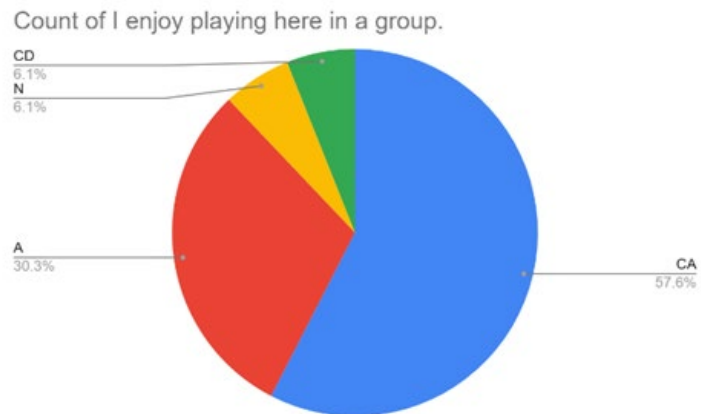
completely disagree responses suggests that strong opposition or indifference is less common.

In response to the encouragement and playful activities" (Figure 7), The overwhelming

majority of respondents (52.9% + 35.3% = 88.2%) either agree or completely agree that they

feel encouraged to try new and playful activities in the space. This suggests a positive and

supportive environment for play and exploration. However, 5.8% (2.9% + 2.9%) of adolescent participants disagreed or completely disagreed with this statement. Additionally, 5.9% of participants were neutral, which suggests they might be unsure, haven't had enough experience to form a strong opinion, or are hesitant to take a clear stance. In *Figure 8*



responses to the statement, "I enjoy playing here in a group"(Figure 8), the combined percentage of those who agree or completely agree (87.9%) demonstrates a strong positive sentiment towards playing in a group in this space. however, is only 6.1% of adolescents also completely disagree with this statement. This suggests that very few people have a strong negative reaction to group play here and reflects that APL foster a strong sense of group enjoyment and collaboration.

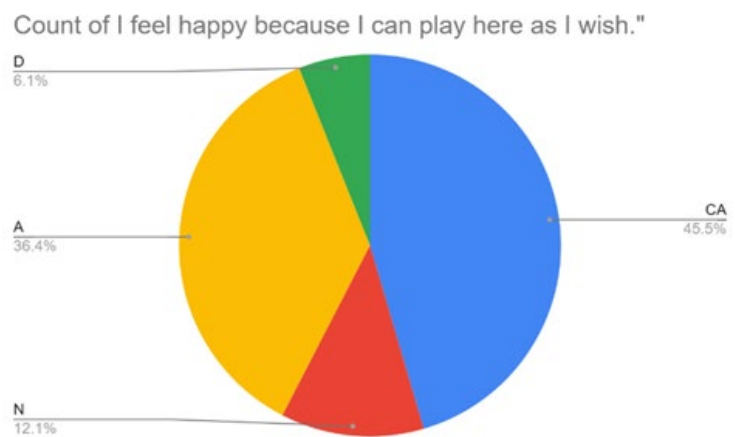


Figure 9

In response to the statement, "I feel happy because I can play here as I wish" (Figure 9) 81% of adolescents felt happy playing freely, showing that autonomy supports their well-being. The 6% negative responses highlight the need for inclusive, supportive environments that respect diverse play preferences. The overwhelming majority of adolescents express happiness with the freedom to play in the APL, highlighting that the space provides an enjoyable and flexible environment. However, the

presence of some "Disagree" and "Neutral" responses signals that a small number of adolescents may feel restricted or indifferent to the freedom provided in the APL. These responses could be due to factors such as personal preferences, the types of activities available, or the structure of the play environment. Understanding the reasons behind these responses would be important

for further enhancing the APL and ensuring that all adolescents can fully enjoy their time there.

To explore how physical spaces influence adolescents'

Shared and Indv.

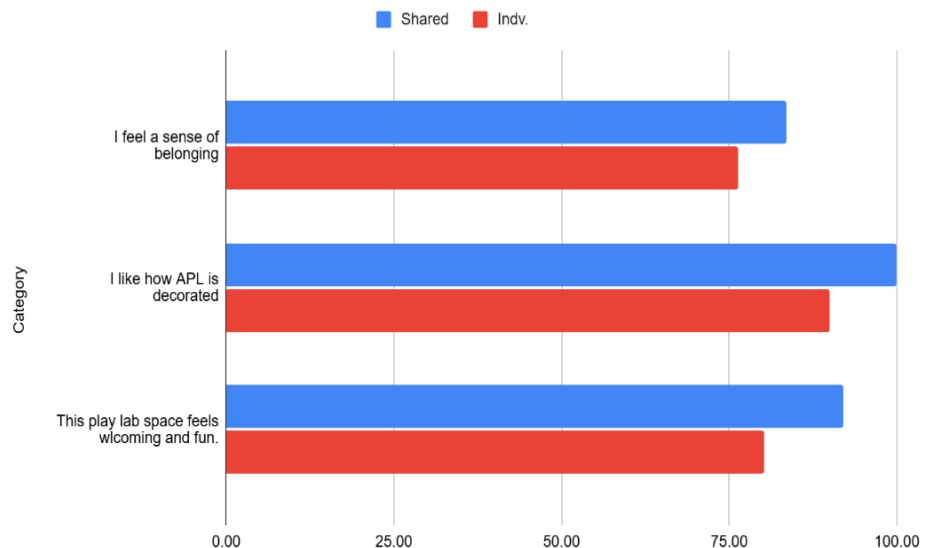


Figure 10

perceptions and experiences, this study explores and compares shared and individual Adolescent Play Lab (APL) settings. In most cases, (Figure 10) the results were similar across both settings. Here some differences. In all three areas, shared spaces received slightly higher responses than individual spaces, although the differences were not very large. Adolescents generally felt a stronger

connection in shared play lab spaces compared to individual ones. While individual spaces were also appreciated, shared

I enjoy playing here in a group. and I feel happy because I can play here as I wish."

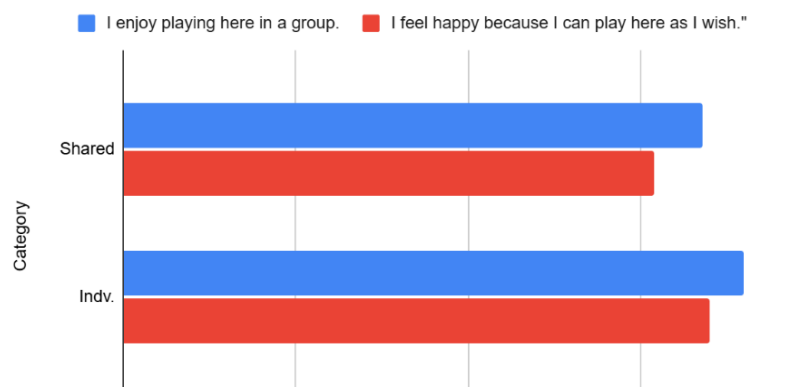


Figure 11

environments seemed to support more interaction and emotional comfort. When it came to decoration, shared spaces were rated slightly higher, possibly because they feel more engaging or reflect a collective sense of ownership. Both types of spaces were viewed as fun and welcoming, but shared spaces again received slightly more positive feedback. although the differences are not very large, the results show a general preference for shared spaces, especially in fostering a sense of togetherness and a positive environment. To understand the play opportunities in the two types of spaces, the study compared responses to two statements: “I enjoy playing here in a group” and “I feel happy because I can play here as I wish.” The results show that both shared and individual play lab spaces received positive feedback from adolescents. However, adolescents in the individual space more frequently mentioned feelings of playfulness and group play. This suggests that while both spaces support enjoyable play experiences, the individual space may offer more freedom and flexibility, allowing adolescents to play in ways that feel meaningful to them. Through this survey study, an emotion-checking question was asked to the adolescents, where they had to select how they feel when they come to the APL. Most adolescents responded positively: 25% selected a grinning face emoji and 66.7% chose a smiling face emoji. Another 8.3% selected a surprised face to express their feelings, while some participants did not answer the question.

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The results show that most adolescents feel happy when they visit the APL, with nearly 92% choosing either a grinning or smiling face emoji. A small group chose a surprised face, which might indicate moments of unexpected excitement or novelty. Some participants did not respond, which could mean they are indifferent or unsure about their feelings. Overall, these findings confirm that the APL is a welcoming and enjoyable space for most adolescents.

An open-ended question was included in the survey, allowing adolescents to provide any suggestions or changes they desired. They offered a range of practical recommendations for improving the APL. Some noted that instead of a traditional football, a tennis ball would be preferable, suggesting a need for play equipment that better aligns with their interests. They also highlighted the need for a variety of play items, including traditional toys like “Dori Laf” (jumping rope). For seating, they recommended replacing tires with more comfortable options, such as proper cushions, stools, or balloon-like seating bags. Additionally, they expressed a preference for using carpets instead of hard mats to create a softer, more inviting floor. In terms of storage, adolescents suggested replacing the tin tank with a cupboard and emphasized the need for larger storage or display areas where they could exhibit their creations. They also mentioned that reducing dust and minimizing external noise would enhance their experience. Some expressed a keen interest in having more art materials, such as colors, as well as musical instruments. Although some adolescents did not respond to the open-ended question, the feedback collected provides valuable insights into their needs and suggestions for improving the APL.

4.2.1 Discussion on the quantitative data:

By analyzing the each survey data, some clear patterns has been emerging that highlight adolescents' experiences in the Play Lab. It also shows both common views and meaningful differences in their perceptions and preferences. A clear pattern of positive responses is observed through multiple indicators of survey. A total of 84.8% of participants agreed that the Play Lab felt welcoming and fun, with 60.6% completely agreeing and 24.2% agreeing. Similarly, 88.2% felt encouraged to try new activities. Furthermore, 76.5% of adolescents completely agreed that they enjoyed their time in the Play Lab. These reflect that APL is a positive, engaging space for most participants; and this echoing research by Larson (2000),

which emphasizes the importance of autonomy and engagement in adolescent extracurricular settings. In the emoji-based emotion check, 91.7% of adolescents chose either a smiling or grinning face, indicating a strongly positive emotional response toward the APL. A small portion (8.3%) selected a surprised emoji, which may suggest feelings of curiosity or unexpected experiences. Overall, this supports the finding that adolescents generally enjoy their time in the play lab. However, the analysis also uncovered some important details beneath this overall positive response. A noticeable pattern was seen in responses related to group play and social interaction, such as “I enjoy playing here in a group” and “I feel encouraged to explore my creativity in this space.” These statements received high levels of agreement, suggesting that the Play Lab supports peer collaboration and creative expression. However, there was slightly more variation in responses to the statement “Sometimes I feel tired or bored coming to APL,” with a few participants choosing neutral or disagreement options. While 84.8% of adolescents perceive the Play Lab as welcoming and fun and 14.7% completely agree that they sometimes feel tired or bored. This suggests that despite overall positive engagement, a meaningful minority experiences moments of disengagement or fatigue. This could reflect natural fluctuations in adolescent motivation, or potential limitations in activity variety or session timing. This may reflect individual differences in energy, session timing, or the repetitive nature of some activities and creates opportunity for further study. When comparing perceptions between shared and individual APL spaces, no major differences were observed overall. However, shared spaces scored slightly higher on indicators such as sense of belonging, decoration, and general fun, while individual spaces appeared to support more self-directed play. These variations, though minimal, could reflect the different accessibility patterns shared spaces being open throughout the day, while individual spaces are available only during scheduled sessions. Analysis of open-ended responses revealed clear patterns in participants' suggestions for improvement. Multiple requests emerged for environmental

modifications, particularly replacing tires with more comfortable seating (5 mentions), using carpets instead of hard mats (4 mentions), and providing different sports equipment like tennis balls instead of footballs. These practical suggestions provide clear guidance for improving the physical space to better support the needs of its participants. There was also a noticeable difference in survey participation between girls and boys, with significantly more girls taking part in the survey. This contrast highlights the need to explore possible reasons behind the lower participation of boys. This gender imbalance, but those present showing high enthusiasm urge the presence of possible socio-cultural or motivational barriers, as well as opportunities to further adapt the curriculum to better engage boys. Overall, from the quantitative findings provide a comprehensive view of adolescents' experiences and perceptions of the APL, addressing both strengths and areas for improvement.

4.3 Qualitative Approach: FGD Analysis

Two FGDs were conducted using semi-structured questionnaires in two schools in Teknaf and Ukhiya. FGD-1 was conducted on February 2, 2025, at X School in Teknaf, and FGD-2 was conducted on February 3, 2025, at Y School in Ukhiya. After transcribing the FGD data, the researcher coded the adolescents' responses and analyzed them using a thematic approach. This analysis highlights five key themes:

1. Positive emotional attachment to the play bab
2. Bonding and collaboration
3. Capacity building and support
4. Play, fun, and enjoyment
5. Physical space of the Play Lab

A. Positive emotional attachment to the play lab

The participants enthusiastically shared their joy and appreciation for the Play Lab, describing it as a space where they could freely play, express their creativity, and relax. They also perceived the Play Lab as a unique space where they felt a strong sense of belonging.

Some of their expressions include:

“I like coming here... I enjoy all activities here.” (FGD-2)

“We like coming here, but we don’t all come together. We come in groups.” (FGD-1)

Another adolescents also mentioned-

“Whoever likes it comes here. Those who don’t like it, don’t come.” (FGD-1)

“We enjoy playing here... we laugh a lot together”. (FGD-1)

This statement shows that joining the Play Lab is a personal choice. Those who enjoy it come and take part, while others who are not interested simply don’t join. It highlights that the space is open and welcoming for those who find it fun and meaningful.

B. Bonding and collaboration

It’s found that adolescents saw the APL as a place to connect with others, where teamwork was both fun and helpful. They expressed that positive experiences were mainly shaped by group activities, fun and the support of their peers.

“We really enjoy working together... It doesn't feel as good when working alone... We talk to each other while working.” (FGD -1)

“I can’t draw a straight line, but my teammate helped me one day.” (FGD -2)

Both FGDs revealed that the Play Lab is a space where adolescents enjoy working together.

The collaborative environment helps them build friendships and stay engaged, making it different from places where they usually play alone.

Another adolescent also contrasted the Play Lab with home, school, or outdoor spaces, highlighting its unique role in their lives.

“Here, everyone stays together in this room... but outside, they all go their separate ways. Some wander around, while others head in different directions.” (FGD -2)

“I love drawing here... can’t do this at home earlier.” (FGD- 2)

This statement shows that the Play Lab brings everyone together. Inside, adolescents stay connected, interact, and engage with each other. But once outside, they go their separate ways and follow their own interests. This suggests that the Play Lab creates a sense of community that may not exist in other spaces.

C. Capacity building and support

It’s found that, APL also contributed significantly to the development of new skills among adolescents. Many participants shared how their abilities had improved through the structured activities offered by the Play Lab. For instance, one adolescent mentioned that before coming to the Play Lab, they could only make birds, but now they have learned to sew clothes.

Another shared that they couldn’t make flowers before, but now they could, thanks to the skills they learned in the APL. The structured mentorship from facilitators and peer support was key to this skill development, allowing adolescents to learn new things they might not have access to elsewhere.

“Earlier, I only made paper birds... now I sew clothes (patchwork) and make beautiful gifts” (FGD-2)

These experiences highlight how the Play Lab’s structured activities and mentorship, including peer support, create an environment where adolescents can learn and acquire new skills, something they might have access to explore in other spaces.

D. Play, fun and enjoyment

Adolescents mentioned that they enjoyed participating in activities like art, crafting, and problem-solving. On the other hand, group games and roleplay were also common, where physical activity combined with social interaction with laughter and fun. These games not only involved movement but also helped build friendships and strengthen teamwork, showing that play can be both physically active and socially enriching.

"I like playing the most. One day we played jumping games, and it was really fun...some of us fell down..we jumped together" (FGD -2)

"We played "Pakhi paka pepe khai"(Bangla rhythmic wordplay) ... whoever can say it five times stays in the game, and those who can't, leave. We were playing another game like this... 'Kacha gach, kada kach'... we had a lot of fun then!"(FGD -1)

Some also shared their favorite moments of play happen in APL-

"One day something really fun happened... We were having our session... we were all sitting, and the boys started saying that they could dance. Usually, we don't see boys dancing. In our area, it's usually the girls who dance. But suddenly, the boys said they could dance. Everyone started laughing... then Samia sang a song, and the boys danced. That day was a lot of fun. We also had a great time when we went outside." (FGD-2)

Additionally, playful mischief, such as teasing and pranking, was highlighted as an important part of the social dynamics. These activities allowed adolescents to explore social boundaries in a lighthearted way, fostering connections without serious consequences.

"There are some here who like to do naughty activity a lot, and that's when it becomes fun." For example, they take something from here and leave it somewhere else. The one who teases the most is not here today." (FGD -1)

These actions are seen as part of the social dynamics, contributing to the fun and bonding within the group. The key quotes reflect how this kind of mischief is not harmful but adds to the enjoyment of the activities. It reflects that APL offers a safe space for adolescents to explore and push social boundaries, like teasing or joking around, without the risk of serious

consequences. These playful interactions help build friendships and strengthen social connections

E. Physical space of APL

Some participants shared their thoughts on how the physical setup of the Play Lab could be improved to make their experience better. They expressed a desire for more comfortable and functional spaces, which would help them enjoy the activities more.

“It would be better if the play area was bigger. There was a swing before... it broke. If it’s fixed, it will be good.” (FGD-1)

“If our display corner were a bit bigger, it would be better. Then we could keep more things on it. Softer mats would be comfortable.” (FGD-2)

4.4 Overall Findings of FGD:

For adolescents, the Adolescent Play Lab (APL) is a space that feels close to their hearts. They are excited and happy to have access to it, as it provides them with opportunities for play, creativity, and social interaction. The APL is a place where they can freely engage in fun activities, build friendships, and express themselves without judgment. Adolescents love the chance to be playful and connect with others through group games, roleplays, and creative activities, all of which promote teamwork, laughter, and a sense of belonging. While the APL is a place of joy and connection, there are a few suggestions for improvement from the adolescents' perspective. They would like to have more space to play, a larger display table for their creative work, and better equipment. For example, they mentioned the desire for repairs to the swing and a larger play area to accommodate more activities. In summary, while adolescents truly value the Play Lab as a playful and social space, they believe that enhancing

the physical environment, such as expanding the space and improving the equipment, would make their experience even better.

4.5 Qualitative data: Observation analysis

A total of five observations was conducted across four schools.

A. Physical space of Adolescent Play Lab: Five sessions were observed in two types (shared classroom facilities and the other with individual classroom facilities) of APLs in total four schools. Each classroom was beautifully decorated and adorned with handcrafted items made by adolescents.



Figure – 12 : Adolescents during the session

Different walls and corners were decorated with various creative elements, and every wall was embellished with drawings and paintings created and colored by the adolescents themselves. A visible difference between shared and individual APLs was the seating arrangement and the lack of free space. However, the researcher found that some individual APL classrooms, which were expected to be solely dedicated to APL activities, were also used for storage. Unused banners, damaged furniture, and other items were stored in these classrooms, gathering dust. As a result, the entire classroom space was not fully utilized for APL activities as expected. Seating arrangements were more flexible in individual APL spaces, using local mats and a platform made from recycled tires, which were often rearranged to accommodate in group activities. On the other hand, seating arrangements in shared classrooms were more structured, consisting of regular school benches and tables. It was also observed that in shared classrooms, some older students



Figure 13: Some students peeing during session



Figure 14: Unused school equipment in APL

were present in the corner, mostly occupied with their school or personal work. However, during APL sessions, they occasionally interacted and made jokes about APL activities. It was also observed that during session times in both types of classrooms, students from other classes would often peek through the door or window out of curiosity, make comments, or initiate conversations with participants. This occasionally disrupted the natural flow of the APL sessions.

B. Social interactions and playfulness between adolescents:

In shared spaces, even with limited room, adolescents actively interacted with each other. They participated in hands-on group activities, worked together on art projects, and played games, demonstrating their ability to adapt and make the best use of the space. On the other hand, individual APLs provided adolescents with more freedom to control their environment. They could sit wherever they wanted, use swings, and even take breaks during sessions. This flexibility allowed them to engage with the space in a way that suited their needs and preferences. However, despite these spatial differences, there was no noticeable impact on their social interactions, sense of fun, or overall playfulness. Adolescents in both settings continued to engage with one another, joke around, and enjoy their activities in similar ways. In both space, adolescents actively support and engage with one another during sessions.



Figure 15 Adolescents participating in APL session

They often assist their peers in activities such as crafting and in experimental activity. This demonstrates a strong sense of cooperation. Playful behaviors were also a natural part of their interactions. Lighthearted teasing, friendly mischief, and playful gestures were highly observed in both spaces. These behaviors create a sense of fun and excitement, making the APL space more engaging.

C. Participation & Gender Dynamics:

During the observations, it was noted that many adolescents tended to arrive on time for the APL sessions, although in shared spaces, some adolescents were seen waiting for the session to start. However, during school events, such as annual cultural program or sports, participation in APL activities was noticeably lower compared to regular sessions. Moreover, it was observed that adolescent boys were less present in the overall number of participants compared to girls. The researcher



Figure 16: Active participation in APL

could not identify a clear reason for this disparity. Despite this, the boys who present on the session, they participated with high energy and enthusiasm, contributing actively to the activities. On the other hand, most of the adolescent girls participated more consistently in the activities. Initially, a few adolescents in both genders, appeared reserved or shy, possibly due to social hesitations or fear of standing out in front of their peers. However, as the sessions progressed, their engagement grew. They became more involved and often participated in smaller groups or one-on-one interactions, gradually building their confidence and involvement. Despite the occasional hesitation or social dominance observed in certain groups, there was no instance where an adolescent seemed entirely inattentive or disengaged from the session. Even though some were initially shy or reluctant, the majority were involved to some extent and participated actively as the session progressed. The group dynamics also showed that, in some instances, adolescents of the same gender (both boys and girls) tended to sit or work together, creating natural clusters. This might

have been due to social hesitance at the initial level, but soon after, when they formed random teams for group activities, they all worked together fluidly, participating in the activities without any noticeable gender-based inhibition

D. Sense of belonging towards APL:

In both shared and individual APL classrooms, adolescents showed a strong sense of ownership over their space. They proudly displayed their artwork and crafts, often pointing them out to their facilitator (Bondhu apa). It was also observed that some of the adolescents confidently raised their hands, engaged in discussions with the facilitator, and presented something they had created. After creating something, adolescents carefully arranged it in the classroom wall or in the rack making sure it was placed nicely. Some even brought artwork from home, carrying it in bags or wrapped in paper, to add to the display.

This behavior highlights that adolescents see the Play Lab as their own, a place where they can proudly share what they've created, and contribute to the space. By adding their own artwork to the display, they are expressing their ownership and attachment to the environment, making



Figure 17: Decorations and drawings by adolescents



it more meaningful and personal for them. This sense of belonging strengthens their emotional

connection with the space and their peers. However, as more creations were added, the available space became limited. Older crafts and artworks sometimes may had to be removed to make room for new ones. This issue was more noticeable in shared classrooms, where space for decoration was even more shorten. Despite these challenges, adolescents remained eager to decorate and enjoy their time on APL and showcase their creativity.

E. Role of the Facilitator (Bondhu Apa) as Observed:

The facilitator, Bondhu Apa, played a critical role in engaging adolescents and creating a positive and fun learning environment. During the session observation, It was found that most of them actively tried to engage with the adolescents, conducting various activities where they were encouraged to participate, work in groups, and collaborate with each other. This helped in building a sense of community and teamwork. For example, Bondhu Apa encouraged everyone to sit together and participate in activities. She also divided them into groups to facilitate better interaction and teamwork. By providing guidance, she helped adolescents who needed assistance with tasks, ensuring that no one was left out. However, it was also observed that at times, the facilitator struggled to maintain focus and involvement from all adolescents. Some adolescents joined the session late, and it was challenging for the facilitator to integrate

them into the ongoing activities. Additionally, some adolescents were distracted, sitting idle or engaging in side conversations, which made it harder for the facilitator to keep them involved.

Bondhu Apa's approach was generally found to be positive and engaging, though at times, maintaining consistency was challenging. Still, she made efforts to engage and support all adolescents. In some sessions, she seemed distracted, possibly due to phone calls or lack of preparation, which could have impacted the overall flow of the session. Additionally, it was noticed that she often praised certain adolescents or asked them to present their work, which might have unintentionally made other adolescents feel overlooked or demotivated. However,



Figure 18: Bondhu apa conducting a session

while Bondhu Apa did her best to engage and support the adolescents, maintaining consistent focus and ensuring equal attention to all participants all by one person; appeared to be challenging at times. This shows the complexities of managing a diverse group and highlights areas where further improvement could be made to foster a more inclusive and balanced environment.

Some images from APL session observation (Figure 19: Random images captured during observation session)

Adolescents participating in Craft activity



Creation after group activity



Decorated handmade recycle handkerchief by adolescents



On-going group discussion and brainstorming (individual APL setup)



Shared APL setup



Adolescent's creation



Chapter 5

Discussion

5.1 Discussion of overall findings

This study's triangulation of survey data (N=34), two FGDs, and five observation sessions presents a consistent and complementary understanding of adolescents' experiences in the Adolescent Play Lab (APL), while also identifying key areas for further attention. The convergence of qualitative and quantitative findings allows for a deeper interpretation of how adolescents perceive, experience, and behave in play-lab. Survey results revealed overwhelmingly positive responses, with 84.8% of participants stating that the Play Lab felt welcoming and fun. Furthermore, 88.2% reported feeling encouraged to try new activities, and 76.5% strongly agreed that they enjoyed their time in APL. These data suggest that APL is a supportive, emotionally engaging environment that effectively aligns with adolescents' developmental needs a finding that echoes existing research emphasizing the importance of autonomy, motivation, and emotional engagement in extracurricular settings (Larson, 2000; Eccles & Roeser, 2011). This was further confirmed by qualitative data. Adolescents expressed strong emotional attachments to the APL space during FGDs, describing it as a place of "belonging," "teamwork," and "creative opportunity." Observational data also supported this, noting adolescents' laughter, enthusiasm, and consistent peer collaboration during activities. Notably, many adolescents personalize the space by proudly displaying their art, bringing decorative items from home, and caring for the setup—an indicator of deep emotional investment and ownership. These behaviors are consistent with Montessori's philosophy that physical environments contribute to self-direction and a sense of belonging (Migliani, 2021). Nearly 90% of participants reported that they enjoyed group play, and this was reflected in the qualitative data through repeated references to friendship, peer connection, and collaboration.

Shared jokes, peer-led activities, and supportive behavior were frequently observed across both space types, reinforcing that the APL successfully meets adolescents' social and emotional needs. This is in line with Eccles and Barber's (1999) findings that extracurricular spaces foster peer bonding, which in turn supports confidence and well-being. However, the data also pointed to areas of concern. Approximately 44% of adolescents acknowledged occasionally feeling bored or tired during APL sessions. Furthermore, 12.1% disagreed with the statement "I feel undisturbed," indicating that some adolescents experienced interruptions. FGDs and observations revealed contextual causes for this, such as noise, lack of variety in activities, facilitator inattention, and side conversations. Bondhu Apas (facilitators) also reported challenges in managing late arrivals and maintaining continuous engagement. These findings suggest the need to diversify activities, enhance facilitator training, and improve space organization especially as repetitive or unstructured sessions may contribute to disengagement. This aligns with studies showing that poorly paced extracurricular activities can negatively impact sustained interest and learning (Simpkins et al., 2005).

Gender-based patterns also emerged. While fewer boys participated in the survey, those who did showed high levels of energy, enthusiasm, and involvement. This gender gap reflects either lower attendance or lower survey response rates among boys, possibly due to academic pressure, social stigma, or lack of male-oriented activities. These dynamics highlight a need for more gender sensitive outreach strategies and programming that better address the needs and preferences of boys an issue also reflected in McNally (2021), who emphasized unequal access to extracurriculars among different social groups. Such findings urge future research to explore the broader social and cultural factors that may affect equitable participation. In terms of spatial experience, both shared and individual APL offered benefits. Shared spaces, which remained open throughout the school day, promoted greater group play, belonging, and peer-led activities. Individual spaces, on the other hand, were accessible only during scheduled

sessions and encouraged more self-directed, small-group, or solitary play. While these findings reveal subtle contrasts, no significant difference in overall engagement or satisfaction was found between the two settings. This suggests that both collaborative and independent play opportunities are essential to adolescent development and that APLs can serve both needs effectively. Further research may explore how access patterns, supervision, or spatial design to mediate these outcomes. Open-ended survey responses and FGD feedback revealed specific, actionable suggestions for improvement. Adolescents called for better seating (e.g., replacing tires with cushions or stools), use of softer floor materials, additional sports equipment (e.g., tennis balls instead of footballs), and efforts to reduce dust and surrounding noise. These environmental suggestions do not contradict the positive survey findings but add meaningful depth highlighting that improving physical conditions could further enhance the play experience. As Montessori suggest, the design and maintenance of play environments significantly shape children's and adolescents' ability to engage meaningfully (Migliani, 2021; Ginsburg, 2007). In summary, triangulated findings confirm that the APL succeeds in creating a space that promotes playful engagement, peer interaction, and emotional well-being. The data also expose some gaps such as occasional boredom, minor disruptions, gender imbalance, and environmental limitations that warrant programmatic attention. By integrating survey responses, qualitative themes, and observational insights, this study not only validates the positive role of APLs in adolescent development but also outlines a roadmap for refining design, inclusivity, and implementation of extracurricular play spaces in rural Bangladesh and similar settings.

5.2 Conclusion

This study embark on to explore adolescents' experiences and perceptions of the Adolescent Play Lab (APL) and to examine the variations in their playful behaviors within this extracurricular setting. Using a convergent mixed-methods approach, the study combined survey data, focus group discussions (FGDs), and naturalistic observations to gain a holistic understanding of how adolescents engage with APL spaces. The integration of qualitative and quantitative findings provided a balanced and triangulated view, revealing both the strengths and improvement areas of the current APL model. The findings indicate that adolescents overwhelmingly perceive the APL as a welcoming, playful, and supportive environment. Quantitative data showed high levels of satisfaction, with participants reporting enjoyment, encouragement, and autonomy during their time in the APL. Qualitative findings added emotional depth to these results, revealing that adolescents feel a strong sense of belonging, ownership, and creative freedom in the space. The display of self-made crafts, peer collaboration, and expressions of joy further illustrated how the APL fosters emotional engagement and peer connection. This study also observed variations in playful behaviors. While group play was the most preferred mode of engagement, some adolescents leaned toward independent or small-group activities. These behavioral differences underscore the importance of designing flexible spaces that support both social and individual forms of play. Although the comparison between shared and individual APL spaces was not the primary focus, the findings suggest that both environments offer unique benefits. Shared spaces encouraged group involvement and emotional comfort, while individual spaces supported autonomy and self-directed play. However, no significant difference in overall satisfaction or engagement was found between the two space types. The study also identified a few challenges. Around 44% of adolescents reported feeling occasional boredom, and 12% experienced disturbances during sessions. These concerns were echoed in the qualitative data, which pointed to noise, limited space, repetitive activities, and late arrivals as contributing

factors. Additionally, fewer boys participated in the APL activities and survey, despite those who did showing high levels of energy and enthusiasm. This gender disparity highlights the need for more inclusive outreach strategies and further research into the social and cultural factors influencing male participation. Adolescents also shared thoughtful suggestions for improvement, such as enhancing seating, reducing dust and noise, and expanding the variety of sports tools and creative materials. These recommendations reflect their strong emotional investment in the APL and provide the importance of listening to adolescents as co-creators of their extracurricular environment. Ultimately, this study reveals that the APL is a meaningful space where adolescents engage in playful behaviors, express their creativity, and form social bonds. At the same time, it emphasizes that the effectiveness of such spaces depends on thoughtful design, inclusive practices, and ongoing responsiveness to adolescents' needs. By integrating adolescents' voices from qualitative inquiry with measurable trends from survey data, this research offers a comprehensive perspective on how play-lab environments support adolescent development. These insights are valuable for educators, program designers, and policymakers aiming to create more inclusive, engaging, and developmentally appropriate extracurricular spaces. In the context of rural Bangladesh and in similar settings globally this study contributes both theoretical understanding and practical guidance on how adolescent-centered design can enhance the impact of play-based learning environments.

5.3 Recommendations

Based on the findings of this study, several key recommendations can be made for Adolescent Play Lab (APL) and similar extracurricular programs in Bangladesh. These are:

- To make the Adolescent Play Lab (APL) more effective, it is essential to design spaces that are open, clean, and comfortable for adolescents. The layout should focus on both functionality and comfort to support different kinds of activities. Its important to give

attention to environmental factors such as reducing dust and noise can also make the space healthier and more welcoming.

- Adolescents should be actively involved in the design and planning of APL activities. Their ideas such as adding different types of balls, using soft carpets instead of mats, and expanding the area for decorative elements can improve the space and make it more engaging.
- There is a need to increase the variety of materials available in the APL. More art supplies and musical instruments should be available to support creativity and expression. Additionally, better storage solutions can help keep the space organized and free up room for active participation.
- Facilitators should receive further training and ongoing support to manage diverse groups of adolescents, ensuring equal attention and minimizing distractions during sessions.
- The study revealed that while girls participated more consistently, boys who did attend were highly enthusiastic. Efforts should be made to understand the reasons behind this gender imbalance and to encourage greater participation.
- Group and collaborative tasks should be emphasized, as adolescents enjoy working together and benefit from shared learning experiences. These activities help build important skills such as teamwork, communication, and mutual respect.
- There is a need for additional research to understand the long-term effects of programs like APL on adolescent development. Future studies should also look into the experiences of adolescents who are less active or absent from such programs to identify and address potential barriers.
- Research and program activities should be scheduled thoughtfully to avoid overlapping with school exams, holidays, and other major events. Careful planning will help ensure

consistent attendance and improve the overall quality of data collection and engagement.

- The findings of this study should be shared with educators, school authorities, and policymakers. These insights can help guide the development of future policies and programs aimed at creating more inclusive, creative, and supportive learning environments for adolescents in Bangladesh and beyond.

References :

- Barrett, P., Zhang, Y., Moffat, J., & Kobbacy, K. (2013). A holistic, multi-level analysis identifying the impact of classroom design on pupils' learning. *Building and Environment*, 59, 678–689. <https://doi.org/10.1016/j.buildenv.2012.09.016>
- BBS. (2018). Report on Bangladesh Sample Vital Statistics 2018. Bangladesh Bureau of Statistics.
- BRAC Play Labs. (2017). Play-based learning: The Play Lab model. BRAC Institute of Educational Development.
- BRAC USA. (2021). Play Lab Impact Report. BRAC USA. [Exact title might differ—no direct source link provided in thesis]
- BRAC Youth Platform. (2024). Adolescent Play Lab Project Summary. BRAC IED. [Exact title might differ—source cited in thesis only]
- Branje, S., Laursen, B., & Collins, W. A. (2021). Adolescence and interpersonal development. In R. M. Lerner & J. B. Benson (Eds.), *Advances in Child Development and Behavior* (Vol. 61, pp. 39–66). Elsevier.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Eccles, J. S., & Barber, B. L. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters? *Journal of Adolescent Research*, 14(1), 10–43. <https://doi.org/10.1177/0743558499141003>

- Eccles, J. S., & Roeser, R. W. (2011). Schools as developmental contexts during adolescence. *Journal of Research on Adolescence*, 21(1), 225–241.
<https://doi.org/10.1111/j.1532-7795.2010.00725.x>
- Jubair, M., & Mehenaz, S. (2024). Inequity in adolescents’ access to extracurricular learning: A rural-urban divide in Bangladesh. [Title and authors cited in thesis, full publication not confirmed]
- Larson, R. W. (2000). Toward a psychology of positive youth development. *American Psychologist*, 55(1), 170–183. <https://doi.org/10.1037/0003-066X.55.1.170>
- Lovette, R. M. (2017). The role of classroom space in shaping adolescent identity. *Learning Environments Research*, 20(2), 193–211. <https://doi.org/10.1007/s10984-017-9236-3>
- Mariam, N., Kabir, H., & Hossain, M. (2021). Humanitarian Play Labs and psychosocial development among Rohingya children. BRAC IED internal research brief. [Possibly unpublished]
- McNally, S. J. (2021). Examining equity in extracurricular access: A study of Canadian adolescents. *Canadian Journal of Education*, 44(2), 294–319.
- Migliani, P. (2021). Montessori’s legacy in child-centered spatial design: Implications for adolescent development. *Journal of Educational Spaces*, 5(3), 212–229.
- Martensson, F., Boldemann, C., Söderström, M., Blennow, M., Englund, J. E., & Grahn, P. (2013). Outdoor environmental assessment of attention promoting settings for preschool children. *Health & Place*, 21, 61–69.
<https://doi.org/10.1016/j.healthplace.2013.01.005>
- Mylonas, G., Hofstaetter, J., Friedl, A., & Giannakos, M. (2021, June). Mission-based extracurricular programs in schools across Europe: A comparative study of adolescent engagement. *Journal of Educational Research and Practice*, 11(2), 112–130.
- Sanderson, C. A., & Richards, M. H. (2010). Barriers to adolescent participation in after-school programs. *Youth & Society*, 42(3), 289–313.
- Shernoff, D. J. (2008). Engagement in after-school programs as a predictor of academic success. *Applied Developmental Science*, 12(3), 102–113.
<https://doi.org/10.1080/10888690802199470>
- Simpkins, S. D., Vest, A. E., Dawes, N. P., & Neuman, K. I. (2005). Predicting adolescents’ organized activity participation from their motivations, perceptions, and behavior. *Developmental Psychology*, 41(2), 464–476.

- Toftager, M., Christiansen, L. B., Ersbøll, A. K., Kristensen, P. L., Due, P., & Troelsen, J. (2014). Intervention study on physical activity in Danish schools. *Scandinavian Journal of Medicine & Science in Sports*, 24(4), 576–587.

Appendix

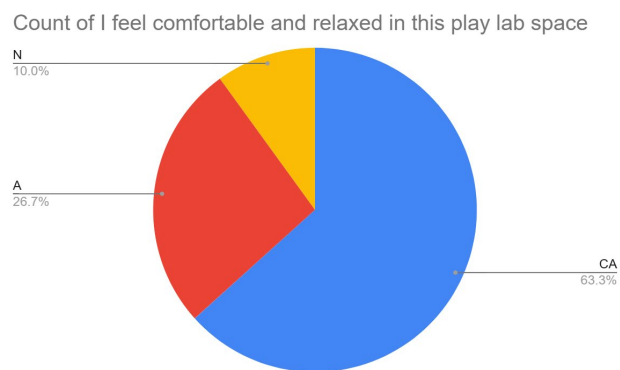


Figure 20

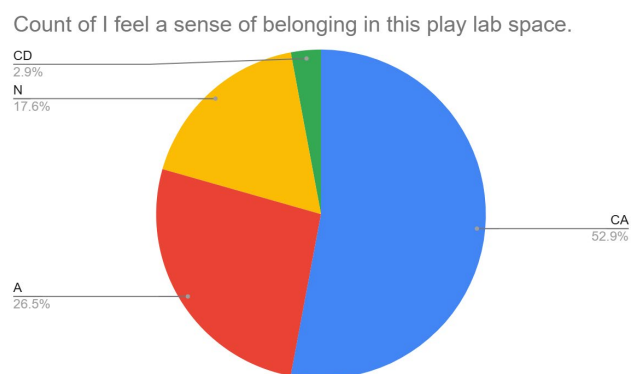


Figure 21

Count of I enjoy the variety of activities and opportunities available in this play lab space.

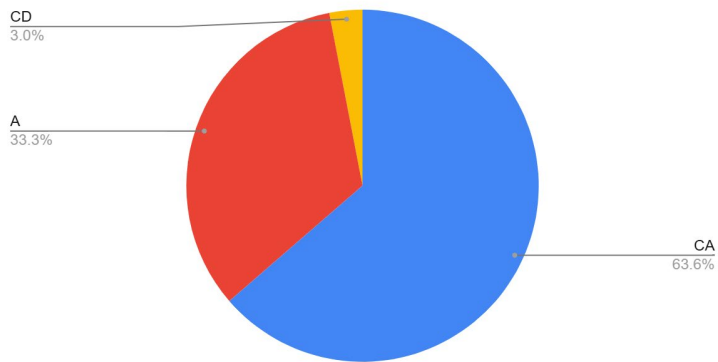


Figure 22

Count of I feel encouraged to explore my creativity in this space

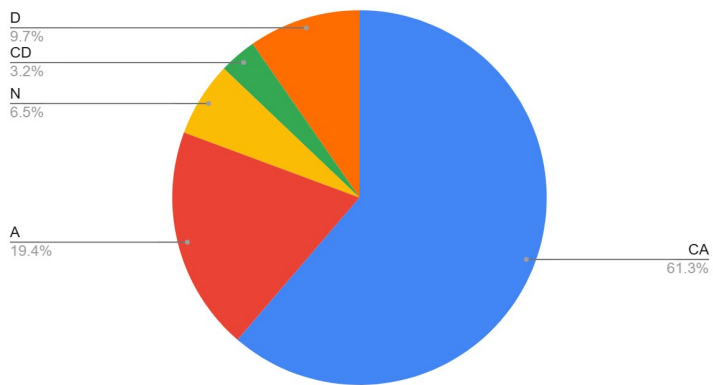


Figure 23

Count of I like how APL is decorated

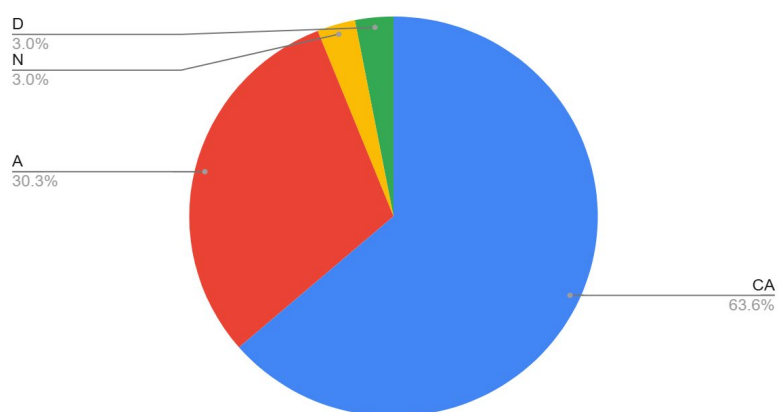


Figure 24