

Why Scientific-Stream Students Stay Out of School Clubs: A Corpus-Based Thematic Analysis of Moroccan Baccalaureate Writing

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Abstract

School clubs can be powerful learning spaces in which adolescents thrive academically, socially, and psychologically. However, in the Moroccan context, research on how students experience club participation—and on the obstacles they face—remains scarce. Therefore, this study aims to fill that gap by examining the challenges that scientific-stream secondary school students report encountering in school clubs. To achieve this objective, a corpus of 116 student emails produced for the 2026 Unified National Baccalaureate writing task, in which scientific-stream candidates were asked to explain the challenges they face in school clubs, was analyzed using Braun and Clarke's six-phase thematic analysis framework. Based on this analysis, four major challenge clusters emerged: academic overload and time poverty; resource deficits (financial, material, and limited club diversity); psychosocial and interpersonal barriers; and governance, institutional management, and access constraints. Taken together, these clusters show that students experience non-participation not as a simple scheduling inconvenience but as a compounding disadvantage embedded in curriculum design, resource scarcity, social exclusion, and institutional neglect. Consequently, the findings indicate that expanding club provision alone is insufficient; rather, clubs must also be adequately resourced, realistically scheduled, competently led, and inclusively governed. Furthermore, the study carries practical implications for Morocco's current education reform agenda and supports the development of a coherent, club-oriented school policy.

Keywords: Extracurricular activities, school clubs, Morocco, Baccalaureate, scientific stream, thematic analysis, learner corpus, qualitative research

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1. Introduction

Over the past two decades, scholars have shown growing interest in the relationship between participation in school clubs and student development. This scholarly attention is best reflected in a substantial body of international evidence showing that, when well-resourced, sensibly scheduled, and inclusively run, school clubs yield measurable gains in academic engagement, social competence, and psychological well-being (Fredricks & Eccles, 2006; Feldman & Matjasko, 2007; O'Donnell et al., 2024). Yet the same literature reveals a gap between what school clubs can achieve and the realities students perceive, particularly in under-resourced, high-stakes educational contexts. This gap is characterized by systematically unequal participation and by structural, financial, psychological, and institutional barriers that prevent students from engaging (Covay & Carbonaro, 2010; Social Mobility Commission, 2019).

In this regard, Morocco offers an under-examined and particularly instructive case study. The country's public education system is currently undergoing a major reform cycle. Draft Law No. 59.21 and the 2022–2026 roadmap, put forward and approved by the cabinet, explicitly present extracurricular activities as an integral part of student formation, citing their potential to reduce the dropout rate and instill active citizenship (Maroc.ma, 2026). In a related finding, de Barros et al. (2026) report that statistics from the "Pioneer Program", which implemented a whole-school reform model, indicate that dropout rates fell by 31.4% while students' confidence and prosocial behavior increased. Despite this policy momentum, empirical evidence on students' own perspectives on club participation in high schools remains conspicuously absent, especially for Baccalaureate students in the scientific stream—the most academically intensive of the Baccalaureate streams, offering options in Mathematics, Physics, and the Life and Earth Sciences. These students' timetables often exceed 30 classroom hours per week and are accompanied by intense examination pressure, yet they are also expected to engage in extracurricular activities identified by the literature as most beneficial for their cognitive and social development (Ministry of National Education, 2015; UNESCO, 2026). Hearing, in their own words, the obstacles they identify is therefore both empirically essential and practically urgent.

This paper addresses that gap. It analyses a corpus of 116 student emails produced for the 2026 Unified National Baccalaureate writing task, in which scientific-stream candidates were asked to write to a school headmaster explaining the challenges they face in school clubs. Three research questions guide the study:

1. What challenges do Moroccan scientific-stream Baccalaureate students report encountering in school clubs?
2. How do these challenges cluster thematically?
3. What do these clusters reveal about the structural, institutional, and psychosocial conditions of extracurricular participation in Moroccan public secondary schools?

2. Literature Review

2.1 Introduction

Over the past twenty years, academic attention to school clubs and extracurricular activities (ECAs) has increased considerably. A substantial body of research confirms their value in promoting well-rounded student growth, strengthening academic motivation, and developing social skills (Feldman & Matjasko, 2007). Yet this same body of work highlights a persistent problem: although clubs are widely recognized as spaces where students can thrive, access to them is routinely uneven. Participation is frequently hindered by complex structural, financial, psychosocial, and institutional obstacles (Covay & Carbonaro, 2010; Dumais, 2006). These challenges become especially pronounced in environments characterized by intense examinations, in schools that lack adequate material resources, and among students from less privileged socioeconomic backgrounds.

It is within this context that Moroccan high schools—particularly those preparing students for the scientific Baccalaureate examination—represent a largely unstudied case. Morocco has officially pledged to incorporate extracurricular activities into its national education reform plans (Ministry of National Education, 2015; Maroc. ma, 2026). Nevertheless, little empirical data document students' own experiences of club involvement or the specific difficulties they face. The following review frames the present research by examining five converging areas: (1) the developmental benefits of ECAs; (2) structural and material barriers; (3) psychosocial and interpersonal challenges; (4) the landscape of the Moroccan education system; and (5) the validity of research conducted on examination-based data.

2.2 The Benefits of Extracurricular Activities: What Is at Stake

To understand why access to school clubs matters, it is first necessary to identify what students stand to gain from attending them. A great deal of research confirms that participation in extracurricular activities produces substantial academic and developmental benefits. Abruzzo et al. (2016) report that adolescents' participation in such activities is associated with greater educational attainment, fewer behavioral problems, and heightened school engagement. Fredricks and Eccles (2006) likewise found that adolescents who participated in school clubs—academic, arts, and leadership-oriented clubs—achieved higher grade point averages, stronger academic self-concept, and higher rates of school completion. Sonule (2024) further corroborates these findings, documenting a strong positive correlation between ECA involvement and academic achievement, including higher GPAs and standardized test scores, alongside the development of critical life skills such as leadership and time management.

Similar results were reported by O'Donnell et al. (2024), who found that Australian adolescents who participated in extracurricular activities reported a stronger sense of school belonging two years later than peers with little or no prior attendance. School belonging, in turn, reduced

depressed mood, providing support not only for promoting students' mental health but also for improving their academic performance. Drawing on a large, nationally representative dataset of 75,515 students, McNeely et al. (2002) confirm that ECA participation is among the strongest predictors of school connectedness—a major protective factor against substance use and other risk behaviors. The social dimension of clubs is equally significant: using social network analysis, Schaefer et al. (2011) demonstrate that shared club participation supports the formation and consolidation of adolescent friendships, with arts clubs showing a particularly strong association with new friendship ties.

For students following a specific academic track, UNESCO (2026) explains that science clubs serve as viable grassroots platforms where young people develop STEM skills, including creativity and problem-solving, through hands-on experimentation that formal curricula often cannot accommodate. Blaxland et al. (2021) provide direct evidence for this in their evaluation of a university–school science club partnership, in which 92.9% of participants reported learning something new, and teachers found the program effective in delivering challenging curriculum content. Furthermore, using longitudinal data, Gottfried and Williams (2013) demonstrate that participation in a domain-specific club (e.g., a mathematics or science club) is associated with a significantly higher probability of declaring a STEM major in college—a finding directly relevant to scientific-stream students in Morocco. Abosi and Brookman-Amissah, as reported by UNESCO (2024), further confirm that school-based STEM clubs improve students' scientific literacy and raise their career aspirations. School clubs are therefore critical: they have a profound impact on learning quality, well-being, and prospects, particularly for students in the scientific stream.

2.3 Structural and Material Barriers to Participation

Despite the benefits described above, not all students participate in school clubs, and participation is far from equal (Bennett et al., 2012). The most robust barrier cited in both the literature and policy reports is financial. Family wealth is among the strongest predictors of extracurricular participation (McNeal, 1998; Bond & Horn, 2009; Bennett et al., 2012), and limited access to financial resources—such as club membership fees, equipment, and transport costs—accounts for much of the gap between high- and low-SES students. This pattern is reflected in British data showing that children from the poorest households are three times less likely to take part in any extracurricular activity than children from the wealthiest households, with household income by far the most important factor in the disparity (Social Mobility Commission, 2019). Under-resourced schools with inadequate infrastructure compound these financial disparities: researchers in sub-Saharan Africa found that schools lacking laboratories, dedicated club spaces, or equipment are structurally barred from offering certain types of clubs—particularly science clubs—owing to the wide gap between policy provision and material reality (UNESCO, 2024; InterAcademy Partnership, 2026).

The geographical dimension of this inequality is also well documented. Investigating 48 Moroccan middle schools, El-Batri et al. (2019) reveal a significant achievement gap in environmental education between urban and rural areas, with rural clubs facing greater material obstacles and lower student enrolment. This spatial inequality is further compounded by infrastructure deficits, a pattern that Walker et al. (2023) confirm in post-COVID England, where schools struggled to provide adequate provision, leading to socioeconomic and gender inequalities in participation.

A second major structural barrier is academic workload and time poverty. When faced with demanding examinations, students enter what researchers call a structural "time squeeze", in which participation becomes difficult, if not impossible, alongside rigorous academic preparation (Covay & Carbonaro, 2010). The breadth of ECA participation falls sharply as academic pressure intensifies in the later secondary years (Fredricks & Eccles, 2006). The Turkish context offers a compelling parallel: through interviews with school principals and teachers, Çınar (2019) identifies a severe shortage of suitable spaces and time for club activities—largely due to double-shift schooling—and recommends allocating official lesson time to clubs to enable them to fulfill their socialization and democratic functions. Keçe (2015) similarly found that student clubs in Turkey often fail to fulfill their purpose due to inadequate logistical conditions, time constraints, and overcrowding. A further limiting factor is restricted club diversity: where students find no clubs matching their interests and abilities, they disengage—an observation documented in the U.S. SEED Survey (Oregon Department of Education, 2024) and echoed in Moroccan environmental education research (El Fadel & Merzouki, 2024).

2.4 Psychosocial and Interpersonal Obstacles

Structural barriers alone do not fully explain non-participation. A growing body of research highlights the psychosocial dimensions of accessing ECAs, focusing on how social anxiety, bullying, and feelings of belonging influence students' willingness to join clubs and remain in them. Bouchard et al. (2023) show that peer relatedness and school belonging are strong predictors of adolescents' extracurricular participation. Students with strong social connections to peers are more likely to join clubs, whereas those experiencing social isolation or anxiety are more prone to exclude themselves, even when clubs are physically available. The Social Mobility Commission (2019) similarly identifies "lack of confidence and fear of not fitting in" as the second most frequently cited barrier (after cost) to ECA engagement among low-income students. Grounding their analysis in the Search Institute's framework of 40 developmental assets, Logan and Scarborough (2008) further demonstrate that positive interpersonal relationships between students and staff—of the kind that well-run clubs can cultivate—are linked to higher emotional well-being and academic success.

The link between bullying and extracurricular participation further complicates the picture. Hong et al. (2023) report a negative association between bullying victimization and involvement in clubs and organized activities during early and middle adolescence. Examining 236 primary school

students in Serbia, Marković et al. (2017) document that students involved in sports activities are significantly less exposed to school violence, suggesting that well-run clubs can function as protective environments—but only when the club environment itself is safe and inclusive. Ruvalcaba et al. (2017) show that participation in artistic and sports groups correlates with higher emotional intelligence and resilience in adolescents, but critically, only when group membership is experienced as positive and inclusive. Clubs that foster internal hierarchies, gatekeeping, or social aggression undermine the very psychological benefits they could offer. This is supported by Xu and Fang (2021), whose study of a large sample of Chinese middle school students revealed a strong negative correlation between school bullying and both school belonging and subjective well-being, with belonging mediating 78.9% of the effect of bullying on well-being. Collectively, this literature suggests that the quality of the club experience is as crucial as its mere availability—a distinction central to interpreting the student narratives in this paper.

2.5 The Moroccan Educational Context and the Research Gap

The two-year cycle of secondary education culminating in the Baccalaureate (Bac)—the main gateway to higher education—is particularly demanding for scientific-stream students across mathematics, physics, the life and earth sciences, and engineering. This stream is widely regarded as the most demanding, with students receiving around 30 hours of instruction each week (Ministry of National Education, 2015). In their comprehensive review of school life in Moroccan educational institutions, Abderrazzak and Moumen (2024) highlight that educational inequality between urban and rural schools, together with the STEM-integration goals of the 2015–2030 Strategic Vision, further compounds this academic intensity.

In policy terms, extra-curricularism has been gaining momentum in Morocco. The National Charter for Education and Training (1999) and the Strategic Vision 2015–2030 both emphasize the importance of extracurricular clubs as a vital pedagogical and citizenship component of the Moroccan school system (El Fadel & Merzouki, 2024). Investigating environmental clubs in Moroccan secondary schools, Riouch et al. (2025) confirm that regional educational and socio-institutional contexts significantly influence the extent to which students sustain engagement—pointing to the uneven implementation of club policy across the country. This is corroborated by Cherai et al. (2017), who stress that the success of environmental clubs in Moroccan schools depends on administrative support and regional NGO partnerships, which remain structurally absent in many institutions. More recently, the 2022–2026 education roadmap and draft Law No. 59.21 on school education, approved by Morocco's cabinet in June 2026, explicitly situate extracurricular activities within the broader goals of reducing dropout rates and strengthening citizenship education (Maroc.ma, 2026). Early evidence from Morocco's "Pioneer Colleges" program is encouraging: a whole-school reform integrating clubs with psychosocial support produced a 31.4% reduction in dropout rates and measurable gains in self-confidence, prosocial behavior, and creativity (de Barros et al., 2026).

Yet, notwithstanding this momentum at the highest levels of policy, there is currently no empirical research documenting how secondary school students engage in and experience club participation—in particular, the barriers they face and how the scientific stream shapes their extracurricular experience differently. Beyond Ibourk (2016), who notes that the existing literature focuses primarily on formal learning outcomes and language policy, few studies engage with students' perspectives on club provision in Moroccan secondary schools. This study aims to fill that gap, offering the first corpus-based account focused specifically on Moroccan scientific-stream secondary school students.

3. Data and Methodology

3.1 Research Design

This research follows a qualitative, corpus-based thematic analysis approach. It adopts an interpretive stance, treating student-produced texts as meaningful, contextualized expressions of lived experience through which insight into the conditions of extracurricular participation in Moroccan secondary schools may be gained (Braun & Clarke, 2006; Creswell & Poth, 2018). Thematic analysis was selected for its flexibility and its established record in educational research involving student-authored textual data (Braun & Clarke, 2006).

3.2 The Corpus

The data consist of 116 student emails written by scientific-stream candidates for the 2026 Unified National Baccalaureate (Bac) writing task administered across Morocco. In the task, students were asked to explain the difficulties they face in their school clubs in a formal email to their headmaster. The emails were transcribed from handwritten or scanned formats into a single research corpus. Several features of the study should be made explicit to inform the discussion that follows. First, the data were generated under examination conditions: students responded to an externally defined prompt within a timed, high-stakes context, so their perspectives are filtered through the genre and pragmatic demands of a formal writing task. Second, students wrote their responses in English, Morocco's third language after Arabic and French. Their responses frequently display non-standard grammar, lexical gaps, and formulaic phrasing. The study treats these non-standard, non-native features as inherent and representative of a natural dataset of English-as-a-foreign-language student writing (Flowerdew, 2002). Third, the corpus does not permit differentiation of students by gender, geographical location, school type, or socioeconomic background. Further explanation is provided in Section 3.5.

3.3 Analytic Procedure

Building on the six-phase framework of Braun and Clarke (2006), the analysis was organized into four principal stages.

Stage 1 — Familiarisation. All 116 scripts on club participation were read several times, allowing initial notions of recurring ideas, phrases, and concerns to take shape.

Stage 2 — Initial coding. Each script was coded for any meaningful unit of content describing a difficulty, barrier, or obstacle to club participation, yielding 312 such segments.

Stage 3 — Theme development. The 312 segments were grouped into candidate umbrella themes based on their semantic and conceptual similarities. Ten candidate themes were identified: academic overload and time poverty; financial barriers; infrastructure and equipment deficits; deficiencies in club diversity; social anxiety and low self-confidence; bullying and peer exclusion; weak leadership and management; club-timetable clashes; family or parental resistance; and transport and geographic access.

Stage 4 — Final theme formation. To suit the scope and page limit of the paper, the ten candidate themes were regrouped into four higher-order conceptual clusters—Academic Overload and Time Poverty; Resource Deficits; Psychosocial and Interpersonal Barriers; and Governance, Institutional Management, and Access Constraints—while retaining the empirical granularity of the underlying data.

3.4 Validity and Reliability Measures

Analytical rigor was pursued through prolonged engagement with the corpus, reflexive memoing throughout the coding process, and an informal member-check consultation with two practicing secondary school teachers in Morocco who are familiar with the examination context. The quotations included in the findings are exemplars of wider patterns, not isolated instances.

3.5 Ethical Considerations and Limitations

The data originated in a national public examination context and, in their original state, are not individually confidential in the usual sense (no personal identifying information beyond image codes was retained during analysis). Nevertheless, the cited content has been selected with the same sensitivity to participant dignity that would apply to interview data.

The study is subject to three main limitations. First, the exam conditioning of the data means that students' writing is constrained by the prompt, the task genre, and examination pressure, so that some responses reproduce formulaic phrases from the rubric rather than elaborating novel observations. Second, the students' L2 writing proficiency—writing in English as a third language rather than their mother tongue—results in accounts that can be underdeveloped or ambiguous, limiting the meaning that can be drawn from certain comments. Third, the study lacks triangulation: no supporting observational, interview, or questionnaire data were collected alongside the corpus examined here.

4. Results

The thematic analysis of the 116 email scripts produced four overarching challenge clusters. Consistent with the analytic approach adopted in this study, each cluster is presented through two complementary layers: (a) a thematic inventory table that catalogues the range of student-expressed ideas within the cluster, preserving as much of the original student wording as possible; and (b) an interpretive prose section that synthesises patterns across the corpus, reports frequencies, and situates the findings within the relevant literature.

4.1 Academic Overload and Time Poverty (Cluster A)

Table 4.1 *Student-Expressed Time and Academic Pressure Challenges (N = 37)*

Heavy Curriculum Load	Scheduling Conflicts	Exam and Homework Pressure
The schedule is very full	The timing of the club matches the class time	Too many exams and homework
We study 36 hours a week	Clubs only available in the evening	Busy preparing for exams
Long hours of study every day	No dedicated day for clubs	The long programme of lessons
Heavy scientific programmes	Club hours clash with extra lessons	Cannot find time to balance studies and clubs
Classes take all our time	Clubs scheduled from 3 p.m. to 8 p.m.	Bac seniors have heavy exam loads
The education system is very demanding	No free afternoon slot	The list of exams leaves no room to enjoy clubs
We barely have spare time	Must stay late, far from home	Studying all the time, no free time
The planning is too messy and full	Transport problems add to timing issues	Tutoring sessions on top of classes

Source: The authors.

The qualitative data reveal that time scarcity is, by a substantial margin, the most pervasive challenge reported across the corpus. Most prominent are students who attribute non-participation to the sheer volume of their academic timetable: of the 116 scripts analyzed, 37 (31.9%) cite "the schedule is very full" or an equivalent formulation as the primary obstacle. As one student states plainly, "the long program of lessons and the list of exams cannot help us enjoy these clubs". This perception is not idiosyncratic; a second student frames it as a mathematical impossibility, asking, "how are we supposed to enjoy school clubs if we study 36 hours a week?"

Scientific-stream students are especially vocal about linking time poverty to pressure to prepare for the Baccalaureate. Several note that "seniors who have exams at the end of the year find it really

hard, since they have heavy exam loads and at the same time want to enjoy their passions in school clubs". This echoes Covay and Carbonaro's (2010) description of the structural time squeeze in high-stakes examination environments, in which the competing demands of academic performance and extracurricular engagement become irreconcilable. Comparative contexts are instructive: Keçe (2015) found that student clubs in Turkish high schools frequently fail to fulfill their developmental purpose due to time constraints and overcrowding, while Çınar (2019) specifically recommends allocating protected lesson time to clubs as the only structural solution. The Moroccan data closely mirror these findings.

The data also reveal a distinct sub-dimension of scheduling mismatch: 12 scripts specifically flag that club sessions are timed impractically, with students reporting that "the timing of the club matches the class time" or that "most school clubs are only available in the evening", when they are already exhausted after a full school day. This finding aligns with Fredricks and Eccles's (2006) observation that structural scheduling—not merely individual motivation—is a key determinant of extracurricular participation.

4.2 Resource Deficits: Finance, Infrastructure, and Club Diversity (Cluster B)

Table 4.2 *Student-Expressed Resource Deficit Challenges (N = 35)*

Financial Barriers	Infrastructure and Equipment Deficits	Limited Club Diversity
Cannot afford to pay for clubs	Equipment is old and rusty	Only one club, for music
Clubs are overpriced	No dedicated rooms for clubs	No robotics or chess club
Parents are poor	Forced to meet in empty classrooms	No technology or science-experiment club
Cannot afford membership fees	No sports ground at school	Only painting, reading, and acting clubs
Clubs require specific amounts of money	Courts and facilities shared with outside schools	No English reading club, only Arabic
Lack of financial support	No library in the school	No diversity of choices
Tutoring and library fees on top of club fees	Balls and equipment are insufficient	Students find nothing that matches their talents
Clubs have no budget for materials	No permanent rooms or spaces	Limited to the classic book club or sports club
Some clubs are too expensive	Floors are old and unsafe	No swimming or table-tennis club
Students struggle to buy materials	No outdoor activity spaces	Places in clubs are limited

Source: The authors.

The analysis of resource-related challenges reveals three closely interrelated dimensions that together constitute a structural resource deficit affecting a significant portion of the corpus. Financial exclusion is the most explicitly articulated: 19 scripts (16.4%) report that students cannot participate in clubs because of the financial costs involved. Students express this in terms of household poverty—"a lot of students are very enthusiastic about participating in school clubs, but their parents are poor"—as well as institutional under-funding: "the biggest problem is the lack of financial support; our clubs do not have enough money to buy necessary materials, like paint for the art club". This dual financial burden—on students and clubs simultaneously—mirrors the findings of McNeal (1998) and Bond and Horn (2009), who identify cost as one of the most potent structural barriers to extracurricular participation in public school systems.

Physical infrastructure deficits compound the financial picture. Approximately 21 scripts (18.1%) report absent or inadequate material conditions: "the equipment is too old and rusty to use"; "we do not have specific rooms for our clubs, so we are often forced to meet in empty classrooms after school"; and "we do not have a single library in our school". These local testimonies are consistent with El-Batri et al.'s (2019) quantitative findings across 48 Moroccan middle schools, which identified a strong correlation between the formal existence of a club program and the material conditions that enable it to function, with rural schools systematically the most disadvantaged. In their study of school volunteering clubs in Croatia, Čekolj and Ilić (2023) further confirm that clubs frequently operate successfully only through the extraordinary enthusiasm of individual coordinators in the absence of institutional financial backing—a dynamic recognizable in the Moroccan accounts. For science-stream students in particular, the absence of laboratory spaces, technology tools, and science-oriented facilities structurally forecloses the very type of club that would most complement their academic track—a gap that UNESCO (2026) identifies as a system-wide challenge in African secondary school science provision.

The third dimension—limited club diversity—is analytically the most significant for this study's focus on the scientific stream. Fifteen scripts (12.9%) report that the available club options do not reflect students' actual interests or aptitudes. Students describe schools where "we have just one club, for music, and it is small", and where clubs "focus on educational activities such as painting, reading, and acting, but neglect areas like technology development and scientific experiments". Several students name the clubs they wish existed: "chess club, environment club, music club, book club"; "robotics"; and sports such as "tennis, golf, swimming, and table tennis". The recurring message is that students are "shocked to hear how limited the options are"—a formulation that signals not merely disappointment but a perceived institutional disregard for the diversity of student interests. This finding resonates with Davies et al.'s (2014) documentation that schools tend to default to a narrow range of club types, and with Gottfried and Williams's (2013) demonstration that it is specifically domain-matched clubs—not generic ones—that deliver measurable STEM academic outcomes.

4.3 Psychosocial and Interpersonal Barriers (Cluster C)

Table 4.3 *Student-Expressed Psychosocial and Interpersonal Challenges (N = 21)*

Social Anxiety and Low Confidence	Bullying, Mockery, and Peer Exclusion	Discrimination and Unfair Entry
Students suffer from social anxiety	The captain makes fun of new joiners	Students bullied for their origins or colour
Students are shy and have no confidence	Older students bully new members	Rich students look down on poor students
Afraid of others making fun of them	Artwork called "bad and hideous"	Outside athletes take all the sports-club places
Fear of being laughed at or mocked	A friend was told her projects were bad	Entry requirements exclude most students
Questioning their own ability	Students leave the club and never come back	Age differences cause problems between members
Stress and psychological pressure	Bullying leaders intimidate members	Uniform and grade requirements are unfair
Do not feel they belong in clubs	Classmates laugh when someone loses	Some clubs do not accept certain students
Low self-esteem affects participation	Clubs suffused with "weird energies"	Members disagree on rules, causing conflict
Feel uncomfortable showing up	Fear of not fitting in	Students feel "sick" and not ready

Source: The authors.

The qualitative data reveal the extent to which psychosocial dynamics—both internal and relational—function as participation barriers independent of structural access. Students report that "many students nowadays suffer from social anxiety, which makes it hard for them to feel comfortable around club members", and that this anxiety translates directly into self-exclusion even when clubs are available. As detailed in Table 4.3, these effects range from internalized self-doubt to externalized social aggression. Students describe a condition in which "their confidence gets lower and lower" and in which they feel "afraid of other people, so they do not feel ready or comfortable showing up in clubs because they feel that others will make fun of them". This is supported by Bouchard et al. (2023), who confirm that social anxiety and peer isolation significantly reduce extracurricular participation rates even when structural barriers are absent. Logan and Scarborough (2008) further argue that deliberate club programs designed to build

student-staff relationships and positive peer networks can serve as a structural countermeasure to precisely this kind of self-exclusion.

The interpersonal environment in clubs is equally susceptible to bullying and peer exclusion. A club's social climate is more likely to be disrupted by interpersonal aggression than by any physical or financial constraint (Ruvalcaba et al., 2017). As a result, many students who join clubs are subsequently driven out through sustained mockery: "the captain of this club makes fun of the new joiners, calling their painting bad and hideous, which makes them leave and never come back". Students link this departure to a collapse in psychological safety, with measurable consequences for school belonging and well-being. Research shows that school bullying has a significant negative correlation with both school belonging and subjective well-being, with belonging mediating 78.9% of the total effect of bullying on well-being (Xu & Fang, 2021). Marković et al. (2017) further confirm that students involved in structured group activities are significantly less exposed to school violence—but only when those activities are themselves free of internal aggression. The loss of a safe and accepting club environment is therefore not only a participation problem but also a welfare problem.

A smaller but analytically significant sub-dimension of Cluster C involves discriminatory practices: five scripts report that students were "bullied for their origins or color", that "players who already play for outside teams sign up and take all the places, leaving nothing for other students", or that "rich students look down on poor students, and that is a big problem for their psychology". These accounts move beyond interpersonal dynamics to reveal structural inequalities reproduced within the micro-social space of the club—a finding that demands explicit attention in any reform of club governance.

4.4 Governance, Institutional Management, and Access Constraints (Cluster D)

Table 4.4 *Student-Expressed Governance and Access Challenges (N = 27)*

Poor Leadership and Management	Parental Opposition	Geographic and Transport Barriers
Leaders chosen randomly, not by competence	Parents see clubs as a waste of time	The club is in another school
Over-ruling leaders who give many orders	Parents do not allow Bac students to participate	Students who live far away cannot stay late
Clubs have become strict and exclusive	Families do not support children's participation	No transport provided for village students
Leaders are rude to students	Parents focus only on exam results	Poor rural schools cannot fund clubs
Lack of teacher supervision and guidance	Family problems affect participation	Public spaces used instead of school
No freedom to organise student-led activities	Some families have financial problems	Distance from school prevents attendance
Weak communication between leaders and members	Parents see clubs as a distraction	Students miss clubs because of transport costs
No permanent supervisor or experienced coach	Some families have social difficulties	Cannot attend evening clubs far from home
Club activities are boring and not as expected	Parents require permission for activities	No school bus for afternoon or evening sessions

Source: The authors.

The analysis of governance and access challenges reveals three overlapping dimensions that together account for approximately 27 scripts (23.3%). 14 scripts identify poor leadership and institutional mismanagement as a root cause of club dysfunction. Students report that "the leaders were chosen randomly and not with the competence the position needs"—a formulation that exposes the absence of any systematic, competence-based approach to developing club leadership in Moroccan schools. Some leaders are described as authoritarian—"some clubs have over-ruling leaders who like to give a lot of orders"—and others as interpersonally abusive: "some club leaders are rude to the students, and every time we make a complaint about them the membership of the club starts to decrease". The consequence is that even well-resourced clubs fail to retain members when their internal governance is dysfunctional. Keçe (2015) identifies analogous patterns in Turkish school clubs: clubs operating under "command" rather than democratic structures fail to

fulfill their socialization function—a parallel that underscores the cross-contextual nature of the governance challenge. Wiedarjati and Sudrajat (2021) further stress that internal organizational climate and recognition from administration are critical external factors that determine students' motivation to join and remain in school organizations—conditions that are manifestly absent in several of the clubs described in this corpus.

Parental opposition constitutes a sociocultural dimension of governance that operates outside the school yet profoundly shapes participation. Six scripts report that parents—particularly those of Baccalaureate-year students—actively discourage or forbid club membership: "some parents are not open-minded about school clubs; they see them as a waste of time, especially for Baccalaureate students"; and "some of them had problems with their parents, who did not allow them to participate in these clubs". This finding situates the school-club challenge within the broader sociocultural logic of Moroccan educational aspiration, in which academic performance is so highly valued that any activity perceived as a distraction carries family-level stigma.

Geographic and transport barriers complete this cluster, reflecting spatial inequalities in access that align with Morocco's urban–rural educational divide. Seven scripts report that distance from school, the location of clubs in "another school", and the absence of transport provision structurally exclude students from rural areas and distant neighborhoods: "students who live far from school cannot stay there for a long time"; "poor schools in villages do not have enough money to start a club". These accounts extend the resource-deficit narrative of Cluster B into the domain of geographic justice—a pattern El-Batri et al. (2019) document quantitatively in their comparative study of Moroccan urban and rural school-club provision.

5. Discussion

5.1 The Compounding Logic of Disadvantage

The four clusters identified here are not independent; their interplay and mutual reinforcement create a situation in which, for many Moroccan scientific-stream students, non-participation in clubs feels almost inevitable. Consider a scientific-stream student burdened with a demanding course schedule (Cluster A). Such a student is also more likely to attend a school with limited club offerings, to face parental pressure to concentrate on academics, and to lack the institutional support needed to manage the social difficulties of joining an activity. It is therefore not any single obstacle but a confluence of difficulties that systematically denies extracurricular opportunities to the very students who, according to existing research, stand to gain the most.

This observation strongly echoes the notion of compounding disadvantage identified in comparable studies from international educational contexts. Research by the Social Mobility Commission (2019) in the United Kingdom found that students from lower-income backgrounds

encounter interconnected obstacles relating to cost, self-assurance, and access. Similarly, McNeal (1998) documented analogous overlapping structural limitations in the United States. Čekolj and Ilić (2023) further demonstrate that even in European contexts, clubs dependent on institutional support frequently collapse when that support is withdrawn, leaving the most vulnerable students further behind. The Moroccan data extend this understanding by applying it to a high-stakes examination system within a developing nation, where financial pressures, inadequate resources, and an overloaded curriculum intersect with psychological insecurities in particularly acute ways.

5.2 The Scientific Stream as a Specific Site of Exclusion

Focusing the study on the scientific stream is theoretically productive because it shows how a track thought to confer academic advantage acts simultaneously as a source of extracurricular exclusion. By institutional design, scientific-stream students face the heaviest curricula, the highest examination stakes, and the greatest time pressure of all Baccalaureate tracks. Paradoxically, they are also the students for whom science clubs and STEM extra-curriculars could offer the greatest curricular complementarity (UNESCO, 2026; El Fadel & Merzouki, 2024; Blaxland et al., 2021). Gottfried and Williams's (2013) evidence that domain-specific club participation significantly predicts the declaration of a STEM college major makes the near-total absence of science-oriented clubs in this corpus all the more consequential. That absence—with students specifically naming robotics, environmental science, chess, and technology clubs as missing—represents more than an inconvenience; it reveals how institutions have failed to recognize students' extracurricular interests as an integral part of their education.

5.3 The Quality of the Club Experience as a Participation Condition

Perhaps the most analytically significant finding in Cluster C is that students do not merely avoid clubs they cannot join; they also leave clubs they have already joined after being mocked or bullied by incompetent leaders. This distinction is crucial for policy effectiveness: increasing the number of clubs and lowering participation costs is not sufficient. The social atmosphere, leaders' behavior, and inclusive practices shape participation outcomes regardless of structural conditions.

This is consistent with Ruvalcaba et al.'s (2017) finding that group belonging predicts emotional resilience only when group affiliation is experienced as accepting and positive, and with Xu and Fang's (2021) demonstration of the large mediating role of belonging in the relationship between bullying and well-being. Marković et al. (2017) further show that the protective effects of ECAs depend on clubs being free of internal violence. Where clubs become sites of ridicule and exclusion, they actively offset the welfare benefits that extracurricular engagement is documented to provide—indicating a governance failure that policy must address in both relational and structural terms.

5.4 Implications for Morocco's Reform Agenda

The results of this study have direct implications for Morocco's ongoing education reform. Extracurricular activities are among the key pillars of quality schooling under the 2026 school reform law (Law No. 59.21) (Maroc.ma, 2026). The "Pioneer Colleges" program shows that a whole-school reform integrating clubs with psychosocial counseling can produce statistically detectable reductions in dropout and improve students' psychological outlook (de Barros et al., 2026). However, neither initiative directly addresses the specific barriers documented here: curriculum-induced time poverty among Bac-year students, the lack of science-aligned clubs, an unwelcoming club climate, and the appointment of untrained club leaders.

Evidence from comparable reform efforts in other countries points to actionable solutions. Çınar (2019) recommends allocating official lesson time to clubs as the only reliable way to ensure they fulfill their socialization function—a recommendation directly applicable to the Moroccan scientific-stream context. Blaxland et al.'s (2021) university-school science club partnership model suggests one path to providing quality STEM provision in schools that cannot independently resource it. Wiedarjati and Sudrajat (2021) point to organizational climate and administrative recognition as essential conditions for sustaining students' motivation to join clubs—underscoring the need for governance reform alongside resource provision.

The study's findings confirm that effective reform requires at least four levers operating in tandem: curriculum scheduling (institutionalised, protected time for clubs within the school week); resource provision (dedicated budgets and physical space, particularly for STEM-oriented clubs in scientific-stream schools); club leadership development (competence-based rather than arbitrary appointment of club supervisors); and psychosocial support (addressing the anxieties, shyness, and belonging deficits that prevent even physically accessible clubs from being psychologically accessible).

6. Conclusion

Analyzing a corpus of 116 student emails written for the 2026 Moroccan Baccalaureate writing task, this study documents—from the students' own point of view—the challenges that scientific-stream students encounter in school clubs. These challenges fall into four thematic clusters: academic overload and time poverty; resource deficits; psychosocial and interpersonal barriers; and governance and access constraints. Together, they form a constellation of compounding disadvantages that systematically preclude extracurricular engagement for the students who would benefit from it most.

Three findings stand out. First, time poverty is the single most pervasive barrier: nearly a third of the corpus (37 scripts, 31.9%) cited a saturated timetable and Baccalaureate examination pressure

as the primary obstacle to participation. Second, resource deficits—financial exclusion, inadequate infrastructure, and, most tellingly for this stream, the near-total absence of science-oriented clubs—deprive scientific-stream students of precisely the extracurricular provision that would most complement their studies. Third, the quality of the club experience proves as decisive as its availability: psychosocial barriers and governance failures drive students out of clubs they have already joined, showing that safe, inclusive, and competently led clubs are a precondition for genuine participation rather than an optional refinement.

On the strength of these findings, the study offers three contributions to the field. First, it provides a student-centered, corpus-based account of school-club challenges in Moroccan secondary education—an account conspicuously absent from the existing literature. Second, it demonstrates that, far from conferring an extracurricular advantage, the scientific stream constitutes a structural site of ECA exclusion, with overloaded timetables and examination pressure crowding out club participation. Third, it establishes that provision (making clubs available) and quality (making clubs safe, inclusive, and well-led) are distinct policy targets; raising the former without attending to the latter will not deliver the developmental outcomes promised in the literature.

These findings should be interpreted with caution, having been obtained under examination conditions, refracted through L2 English writing, and gathered without triangulation against external observational or institutional data. Future research should therefore pursue mixed-method designs that combine corpus analysis with semi-structured student interviews, school-level survey data, and ethnographic observation, to capture the full dynamics of the extracurricular landscape in Moroccan secondary education. Comparative work across the different Baccalaureate streams and longitudinal studies tracking students from club participation to later academic and career outcomes would be especially valuable extensions of this line of inquiry.

Most urgently, however, the central message of this study is clear: for school clubs to fulfill the developmental promise that Morocco's reform agenda attributes to them, they must be adequately resourced, realistically scheduled, competently led, and inclusively governed. Without these four conditions, the gap between policy aspiration and student experience will persist—and scientific-stream students will continue to be excluded from the very spaces designed to enrich their educational lives.

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