FROM MATHEMATICS ANXIETY TO EDUCATIONAL RECOVERY: A CASE STUDY OF HOME MATHS THERAPY

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Abstract**:** *Mathematics anxiety remains a persistent barrier to learning among low- and average-achieving students. This study examines HOME Maths Therapy, an innovative intervention model combining psychologically informed remedial pedagogy with a franchise-based delivery system. Utilizing a qualitative single-case study design, the paper explores the operational practices of the franchise and the entrepreneurial journey of a multi-unit franchisee. Key findings reveal that individualized, diagnostic-led micro-group instruction successfully rebuilds core mathematical competence and reduces learning anxiety, while strict franchisor standardization (centralized R&D, tutor licensing, and operational blueprints) ensures service quality across a rapidly scaling business. This research contributes to the literature at the intersection of educational pedagogy and franchise entrepreneurship, demonstrating how standardized business frameworks can scale affective, student-centered learning interventions without diluting service quality.*

Keywords: Mathematics intervention, educational entrepreneurship, franchise-based education, supplementary education.

1. Introduction

Mathematics anxiety was a significant educational barrier characterized by a profound fear of numbers, trauma from past reprimands, and the intimidation of peer comparison. For many average and below-average students, traditional exam-drilling tuition centres failed to address these psychological blockages and often worsened the issue. This research paper investigated HOME Maths Therapy, a supplementary education franchise in Malaysia that specifically targeted this underserved demographic. Unlike traditional math centres, which focused on repetition and were often geared toward average-to-high-achieving students, HOME focused on Maths Therapy for average and below-average students. The program was specifically designed to help students who experienced math anxiety, were slow to grasp concepts, or relied on finger-counting even in later grades.

"House of Mind Excellence" (HOME), owned by QC Group Sdn. Bhd., was a highly awarded supplementary education franchisor that specialized in remedial mathematics for average to below-average students. Operating on a standardized "copy and paste" franchise model, HOME differentiated itself by providing "Mathematics Therapy" to cure math anxiety

and rebuild foundational competencies through personalized micro-group instruction, deliberately moving away from hyper-competitive exam drilling. The franchisor headquarters (HQ) maintained rigorous quality control by centrally developing its therapy-friendly modules through a dedicated Research & Development department, administering strict psychometric testing and licensing for all Math Tutors to ensure they had the right temperament, and executing a centralized "hub-and-spoke" marketing strategy to drive macro-level brand awareness via billboards and targeted digital advertisements. Figure 1 showed HOME outlets in Malaysia and Indonesia as of 9 June 2026.

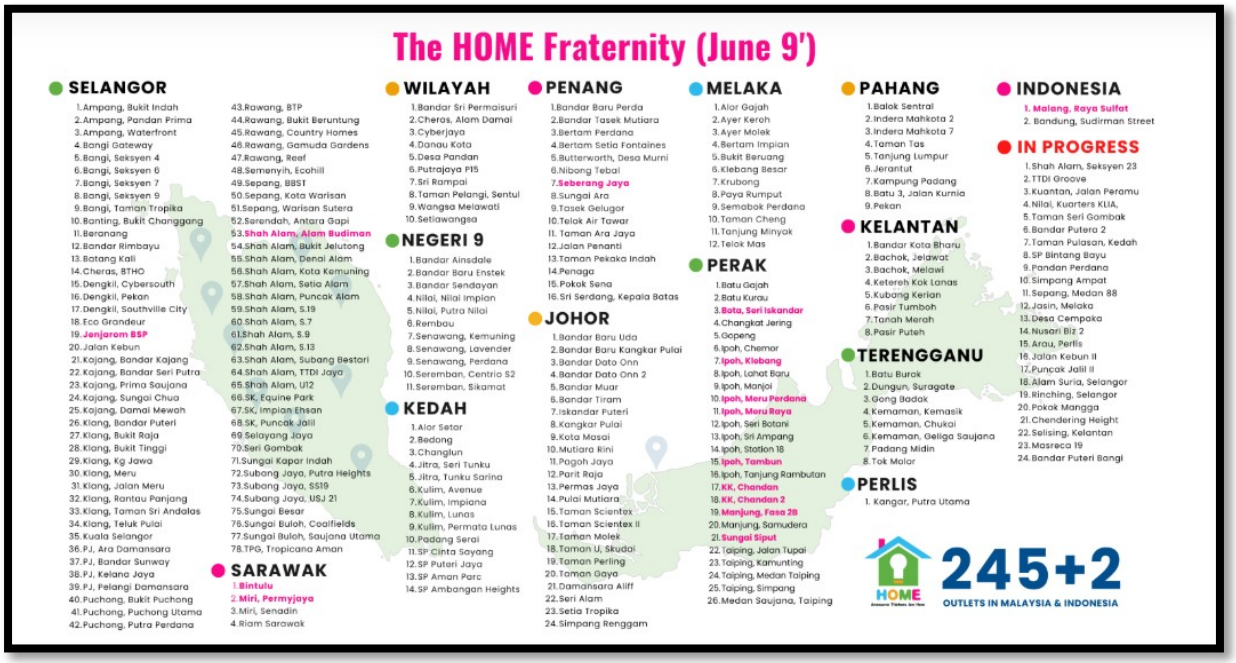
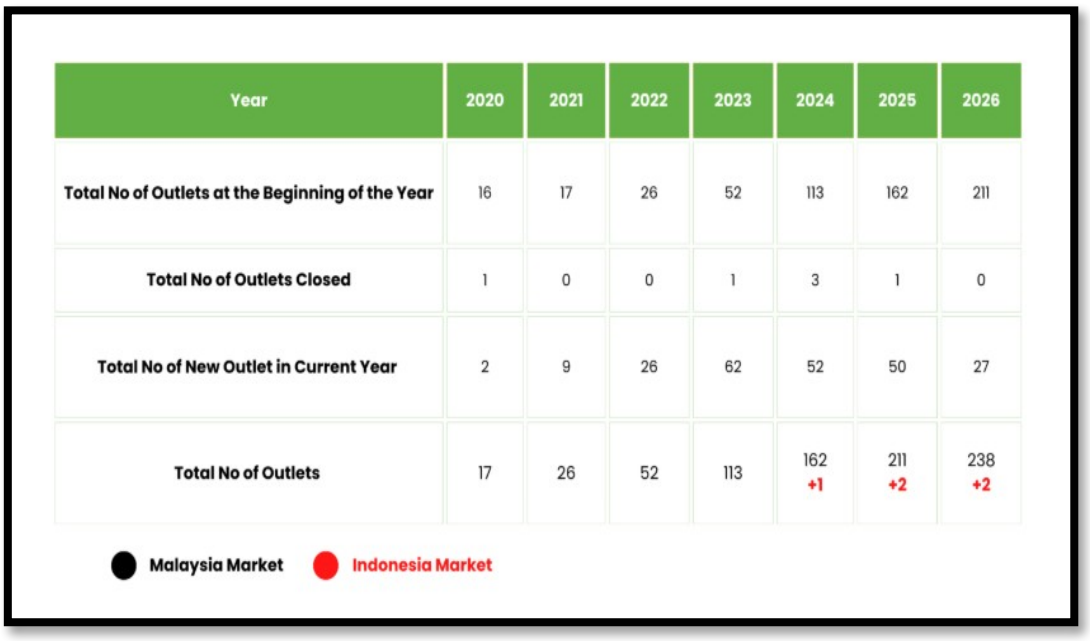


Figure 1. HOME outlets in Malaysia and Indonesia (as 9th June 2026, Franchise Maths Therapy - HOME Maths Therapy)

Validating its successful educational and operational ecosystem, HOME won consecutive "Franchise of the Year" awards in 2024 and 2025, and was expanding its operations internationally, including in Indonesia, under the brand name "OHXEM". Figure 2 showed the HOME franchise growth in Malaysia and Indonesia as of 9 June 2026.



Year	2020	2021	2022	2023	2024	2025	2026
Total No of Outlets at the Beginning of the Year	16	17	26	52	113	162	211
Total No of Outlets Closed	1	0	0	1	3	1	0
Total No of New Outlet in Current Year	2	9	26	62	52	50	27
Total No of Outlets	17	26	52	113	162 +1	211 +2	238 +2

Malaysia Market Indonesia Market

Figure 2. The HOME franchise growth in Malaysia and Indonesia (as 9th June 2026, Franchise Maths Therapy - HOME Maths Therapy)

By examining the entrepreneurial journey and operational execution of a multi-unit franchisee, Teacher Nourul, this case study explored how the integration of remedial psychology with a highly standardized franchise blueprint successfully remedied math anxiety while sustaining scalable business growth.

2. Background and Educational Entrepreneurship

Teacher Wan Nourul Akmal (Teacher Nourul) originally came from an engineering background, having studied Computer Engineering at the International Islamic University of Malaysia (IIUM) and later earned a master's research degree from Universiti Sains Islam Malaysia (USIM), where she wrote a thesis focusing on biometric encryption. After working briefly as a polytechnic lecturer and enduring a long-distance marriage while raising a daughter, she resigned and shifted into business to gain more flexibility. She initially ran a food business and co-founded an Arabic-language kindergarten, which she operated for about 10 years. She managed the administrative and business setup while her partner focused on the teaching modules.

Her journey into educational entrepreneurship originated from a personal need. A former computer engineering lecturer, she transitioned into early childhood education before discovering "math therapy" to help her eldest daughter, Fayha, who struggled with mathematics. Motivated to help her daughter, she researched various methods online and discovered a "math therapy" program under the HOME franchise. She travelled to Ipoh, Perak, to meet the founder. By starting a small-scale home-based initiative in a vacant rental flat with an initial capital of approximately RM10,000, Teacher Nourul tested the foundational teaching methods on her daughter and a few peers.

Recognizing the transformative impact of the pedagogy, Teacher Nourul officially invested in the HOME franchise system. Guided by the franchise founders' mentorship based on Kiyosaki's (2012) *Cashflow Quadrant* framework, she successfully transitioned from being

a self-employed educator to a multi-unit business owner. Within entrepreneurship literature, this shift represents a transition from operator-centric self-employment (the 'S' quadrant), where business capacity is bottlenecked by the owner's personal labor hours, to a systemized enterprise (the 'B' quadrant), where value is generated through delegation, scalable governance, and standardized processes. In educational entrepreneurship, moving across these quadrants is notoriously difficult due to the highly tacit nature of teaching; however, the franchise mechanism bridges this gap by commodifying operational tacit knowledge into explicit, replicable systems (Audretsch, 2007; Shane, 2003). By leveraging this framework, Teacher Nourul established a self-sustaining organizational structure managed daily by Assistant Branch Managers (PPCs) and licensed Math Tutors.

She subsequently owned three HOME branches, namely Putra Nilai, Bandar Enstek, and Nilai Impian in Negeri Sembilan. Each centre capped its capacity at around 120 students to maintain a comfortable, therapeutic environment and operated within a system that provided her with time freedom while her business continued to operate successfully.

3. Methods and Materials

The case study employed a qualitative research design to investigate the entrepreneurial journey and operational execution of the HOME Maths Therapy franchise. The materials and methods used to construct this analysis consisted of primary interview data and secondary data from the corporate web platform.

Qualitative data were gathered via an interview to explore the practical realities of franchise ownership. This included examining the "Cashflow Quadrant" mentorship that facilitated the subject's migration from a self-employed operator to a multi-branch business owner who delegated tasks to Assistant Branch Managers (PPCs). The interview also elicited specific case examples of student rehabilitation, detailing how severely anxious students overcame their mathematical phobias. The official HOME Maths Therapy website was utilized to verify corporate service offerings, international expansion strategies (such as the "OHXEM" brand in Indonesia), and industry accolades, including the "Franchise of the Year" awards for 2024 and 2025.

The primary material was a transcribed, one-on-one interview conducted between a researcher and Teacher Nourul, the owner of a multi-unit HOME franchise comprising the Putra Nilai, Bandar Enstek, and Nilai Impian branches. This transcript captured firsthand qualitative insights into her transition from computer engineering to educational entrepreneurship, the operational challenges of managing multiple branches, and the implementation of pedagogical strategies.

Thematic analysis was used to analyse the data. The text from the interview and information available on the corporate website were analysed to identify core operational and pedagogical themes. The analysis focused specifically on evaluating the intervention model, which included mandatory diagnostic assessments, competency-based advancement (pausing syllabus progression to fix foundational gaps), and highly personalized micro-group instruction strictly capped at three to five students per tutor.

Regarding strategic and operational evaluation, the franchisor-franchisee dynamic was evaluated by extracting data on quality control and marketing boundaries. This involved analysing HQ's standardization procedures, notably the rigorous psychometric testing and centralized licensing of MTs. Furthermore, the method analysed how individual branches navigated HQ's strict digital marketing restrictions by leveraging localized Facebook content to drive community trust and word-of-mouth (WOM) referrals.

4. Findings

At HOME Maths Therapy, the educational intervention was heavily structured around individualized learning and emotional safety rather than traditional syllabus progression. The process followed a highly specific pathway:

4.1 Diagnostic Assessment

Every prospective student's journey began with a no-commitment diagnostic assessment. The purpose of this assessment was not to test their knowledge of their current school grade, but rather to identify specific areas of weakness and determine their actual foundational capability. For example, if a student in a higher grade was found to still rely on finger-counting for basic addition, the assessment flagged that they lacked core competencies.

4.2 Student Placement and Competency-Based Advancement

Based on the diagnostic results, students were placed into a strict, sequential learning pathway. The curriculum dictated that foundational gaps had to be resolved first, progressing systematically from basic addition to multiplication, subtraction, division, and finally to standard school syllabus content. HOME utilized a competency-based advancement model, meaning a student was deliberately paused from progressing through the syllabus until they had visibly demonstrated mastery of these foundational concepts. When placing students into classes, they were grouped strictly according to their actual capability level; students undergoing foundational "therapy" were grouped together, separate from those who had advanced to syllabus-level learning.

4.3 Micro-Group Instruction

To successfully execute this personalized therapy and coaching, instruction was delivered in micro-groups. The class sizes were strictly capped based on the student's placement level:

- Therapy Phase: Classes were limited to a maximum of three students per MT.
- Syllabus Phase: Classes could accommodate up to a maximum of five students per tutor.

This micro-group structure was critical for maintaining an emotionally safe, low-pressure environment. It allowed tutors to provide highly personalized, one-to-one coaching and closely monitor each student's progress. Furthermore, by intentionally avoiding crowded classrooms and grouping students with peers at the exact same learning stage, the micro-group setting eliminated the fear of peer comparison, which was a primary cause of severe mathematics anxiety. The success of this therapeutic environment was profound, as evidenced by the successful integration of special needs students, including those with autism, into the learning ecosystem.

4.4 Tutor Recruitment and Licensing

Tutor quality was strongly protected by the franchisor (HQ). Many applicants were professionals, such as engineers, accountants, or schoolteachers, seeking part-time work. Regardless of background, all candidates had to pass a stringent psychometric test administered

by HQ to evaluate their personality and suitability for handling anxious students. Following interviews, candidates underwent multi-stage training, including a practical phase at the branch and a three-month validation period at HQ, before being issued an official teaching license. This teaching license allowed MTs to teach at any HOME branch nationwide. This strict pipeline professionalized the tutors into certified "Math Therapists" rather than casual instructors.

Tutors were employed on a part-time basis. A typical centre employed around 9 to 12 tutors. Tutors were bound by contracts requiring a commitment period (e.g., one year) to protect the branch's initial coaching investment.

4.5 Centralized Curriculum Development

Branch owners were entirely relieved of curriculum development responsibilities. HQ had a dedicated Research & Development (R&D) department that continuously updated the learning modules to align with the national syllabus while keeping them "therapy-friendly" so that foundational gaps were bridged. This centralized development was crucial during the COVID-19 pandemic, as HQ provided digital "Flipbook" modules that allowed Teacher Nourul's and other centres to transition to online classes within just two weeks.

4.6 Branch-Level Standardization

The commercial success of Teacher Nourul's enterprise was deeply tied to the robust "copy and paste" franchise ecosystem provided by HOME. The franchise used a centralized marketing model where HQ handled macro-level brand awareness, while branches handled localized engagement. This model was funded by a royalty of about RM2,400 from each branch, although it was not a flat rate and depended on the number of student quotas allowed per outlet. That number, in turn, depended on the size of the shop premises. If the shop was smaller, the royalty was less than RM2,400, whereas larger premises that could accommodate more students paid royalties exceeding that amount. HQ executed high-impact campaigns, such as major highway billboards and paid digital advertisements. Branches were legally restricted from running unauthorized advertising campaigns to protect the brand. Instead, individual branches acted as digital storefronts, primarily using Facebook to post daily classroom updates that served as "proof of life." The individual franchise branches shared localized classroom updates and parent testimonials, focusing on middle- and bottom-of-the-funnel engagement rather than cold acquisition.

Due to the micro-group constraints, each centre operated at a maximum capacity of approximately 120 students. Demand consistently outstripped supply, leading to waitlists. Growth at the local level was heavily driven by word-of-mouth (WOM) referrals and a strong "sibling pipeline," where parents enrolled younger children after witnessing the success of their older siblings.

The franchise fee scaled significantly, rising from an initial RM10,000 for a home setup to RM90,000 for a fully renovated commercial shop lot. HQ provided a comprehensive operational blueprint for new locations, including data-driven location viability studies, structural floor plans, authorized furniture tallies, and specific paint colour codes to preserve brand identity. Franchise rules allowed a single manager to scale up to a maximum of five branches to prevent market monopoly and encourage shared business opportunities.

Teacher Nourul demonstrated strategic scalability by using her own capital to finance a branch in Kok Lanas, Kelantan, for her cousin. Once the investment was repaid, she strategically recycled those exact funds to open her latest branch in Nilai Impian.

5. Discussion and Conclusion

The HOME Maths Therapy model demonstrated a powerful dual impact on educational recovery and entrepreneurial success. Educationally, the system effectively cured math phobias. A notable success story, and one of the most rewarding aspects of Teacher Nourul's business, was seeing students overcome their fears. She shared the story of a student who joined in Form 2 with severe math anxiety and literally trembled when answering questions. Through the therapy program, the student gradually gained confidence, began teaching her peers in Form 4, eventually scored an A+ in SPM Mathematics, and decided to pursue a degree in mathematics education.

Commercially, the franchisor's governance and innovation were heavily awarded, winning accolades such as "Franchise of the Year 2024 and 2025" and "Best Franchise Innovation 2025". Teacher Nourul's personal success within this ecosystem was also recognized, earning her the "Best Franchisee Award 2023" and making her a finalist for the Malaysia Franchise Award 2025 in the Multi-Unit category. The franchise was expanding internationally into Indonesia under the brand name "OHXEM".

This case study illustrated that psychologically informed remedial instruction, when embedded within an operationally standardized franchise model, could successfully resolve severe mathematics anxiety. By replacing high-pressure exam drilling with diagnostic-led, micro-group therapy, HOME Maths Therapy rebuilt foundational competencies and emotional confidence. Concurrently, the franchisor's "hub-and-spoke" ecosystem, characterized by centralized R&D, strict tutor licensing, and coordinated macro-marketing, allowed franchisees to scale their businesses sustainably without diluting the quality of the educational intervention. This model provided significant insights into the successful intersection of educational recovery and scalable business entrepreneurship.

5.1 Methodological Limitations and Validity

While this qualitative case study provides rich contextual insights into the intersection of remedial mathematics and educational franchising, several methodological limitations must be acknowledged. First, the reliance on a single multi-unit franchisee (Teacher Nourul) limits the statistical and analytical generalizability of the findings. Operational dynamics and student outcomes in this specific regional cluster (Negeri Sembilan) may be influenced by local socioeconomic factors and personal leadership style, which may not fully represent franchisees operating under different regional contexts or skill levels. Second, qualitative data gathered from franchisee interviews carries inherent social desirability bias or subjective interpretation of success. Future qualitative studies should incorporate triangulated data from parents, students, and tutors across multiple independent franchise owners to mitigate franchisee selection bias.

5.2 Future Directions

To extend the findings of this exploratory qualitative study, future research should incorporate quantitative and longitudinal designs. Specifically, comparative empirical studies are

recommended to measure standardized student academic growth (e.g., pre- and post-intervention test scores) and psychometric reductions in math anxiety against traditional, non-therapeutic tuition models. Additionally, cross-comparative studies examining educational franchises across different subject domains (e.g., language arts, science) could further clarify which components of the operational blueprint are universally scalable versus subject-specific.

6. Acknowledgments

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