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Exploring Human Capacity Building Through Entrepreneurship Skills Gained and Implemented in Practice: A Case of Graduated Business Management Students at a Selected Private Higher Learning Institution

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Abstract

Entrepreneurship education is expected to build human capacity, evidence on whether graduates retain and apply the skills they gain remains limited in Rwanda. This study explored human capacity building through entrepreneurship skills gained and implemented in practice by graduated Business Management students at a selected private higher learning institution. Guided by human capital theory, experiential learning theory and entrepreneurial competency frameworks, it adopted an interpretivist paradigm and an exploratory qualitative case study. Graduates were identified from 2026 department records, and 27 were recruited sequentially until saturation, which was reached at the nineteenth participant, with the last eight adding no new ideas. Open-ended Google Forms were sent to one participant at a time and analysed before the next was approached; data were collected in September 2026. Braun and Clarke (2006) six-stage thematic analysis produced five themes on skills gained, five on implementation, five on enabling and constraining factors, and four on institutional contribution. Graduates gained opportunity recognition, planning, financial, marketing, leadership and creativity skills and applied them through own ventures, intrapreneurship, financial discipline, income diversification and community initiatives. Practical exposure, mentors and personal drive enabled application, whereas limited capital, regulatory burdens and thin experience constrained it. Graduates valued practical, values-based teaching and requested incubation, internships and alumni links. Capacity is built when learning is experiential, supported after graduation and connected to finance and networks.

Keywords: Human capacity building; Entrepreneurship skills; Business management graduates; Higher education

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Introduction

Human capacity building, understood as the development of the knowledge, skills, attitudes and competencies that enable people to contribute productively to their communities and economies, is a central purpose of higher education (Becker, 1964; Schultz, 1961). In developing economies where formal jobs cannot absorb the growing number of graduates, entrepreneurship skills have become a particularly important form of human capital because they allow graduates to create value, generate employment and adapt to uncertainty (Kuratko, 2005; Republic of Rwanda, 2017). Business management programmes therefore aim to develop competencies such as opportunity recognition, business planning, financial literacy, marketing, leadership, risk-taking and innovation (Man et al., 2002; Morris et al., 2013). However, acquiring skills in the classroom does not guarantee that they are applied in practice, and the evidence on entrepreneurship education outcomes is mixed, with some studies reporting positive effects on skills and intentions and others reporting limited or even negative effects (Bae et al., 2014; Martin et al., 2013; Oosterbeek et al., 2010). Much of the existing research also measures the intentions of students rather than exploring what graduates actually do after completing their studies, and it is dominated by public universities and high-income settings (Kabongo & Okpara, 2014; Nabi et al., 2017). Private higher learning institutions in Rwanda have expanded access to business education, yet little is known about how their graduates describe the entrepreneurship skills they gained, how they implement them, what helps or hinders them, and how they perceive the contribution of the institution to their capacity. This study therefore explores human capacity building through entrepreneurship skills gained and implemented in practice by graduated Business Management students at a selected private higher learning institution, drawing on the experiences and meanings expressed by the graduates themselves.

Research objectives

The study was guided by four research objectives:

1. To explore the entrepreneurship skills gained by graduated Business Management students.
2. To examine how graduates implement these skills in practice.
3. To identify enabling and constraining factors in applying entrepreneurship skills.
4. To understand graduates' perceptions of the institution's contribution to human capacity building.

Literature review

Human capital theory conceptualises education and training as investments that raise individuals' productive capacity and, consequently, their earnings and contribution to economic growth (Becker, 1964; Schultz, 1961). In entrepreneurship education, this logic implies that skills acquired through study should become visible in how graduates start, manage or improve ventures and work. Kolb's (1984) experiential learning theory adds that learning is a cycle of concrete experience, reflective observation, abstract conceptualisation and active experimentation, which is why action-based pedagogies are widely argued to build entrepreneurial capability more effectively than lectures alone (Cope, 2005; Neck & Greene, 2011; Rasmussen & Sørheim, 2006). Entrepreneurial competency frameworks specify what that capability consists of: Man et al. (2002) identified opportunity,

relationship, conceptual, organising, strategic and commitment competencies, Morris et al. (2013) proposed a competency-based perspective on entrepreneurship education, and the EntreComp framework groups competences under ideas and opportunities, resources and action (Bacigalupo et al., 2016). Empirical syntheses suggest that entrepreneurship education can build human capital: a meta-analysis found a positive and significant relationship between entrepreneurship education and human capital assets and entrepreneurship outcomes (Martin et al., 2013), and another meta-analytic review reported a small positive association with entrepreneurial intentions (Bae et al., 2014). A systematic review, however, noted that most studies are quantitative, concentrate on intentions and pay little attention to long-term outcomes and to what happens after graduation (Nabi et al., 2017).

Studies of specific cohorts present a more nuanced picture. A quasi-experimental study of a mini-company programme in the Netherlands found no significant effect on entrepreneurship skills and a negative effect on intentions, suggesting that early exposure may correct unrealistic expectations (Oosterbeek et al., 2010), while a quasi-experimental study of students in a business programme showed that the effects of entrepreneurship education depend on prior exposure to entrepreneurship and on whether effects persist over time (Fayolle & Gailly, 2015). In sub-Saharan Africa, an examination of university provision documented the growth of entrepreneurship education and its uneven, resource-constrained delivery (Kabongo & Okpara, 2014). These studies largely use survey and quasi-experimental designs with student samples, so they say little about how graduates themselves describe the skills they gained, how they apply them in business, employment and community life, and what enables or constrains application. Few studies are qualitative, few follow graduates after they leave, and few focus on private institutions or on Rwanda. Future research should therefore use qualitative and mixed-methods case studies that capture graduates' own accounts, follow graduates longitudinally to observe business and career outcomes, compare several institutions and programmes, and include employers, mentors and financiers to triangulate perspectives (Fayolle & Gailly, 2015; Nabi et al., 2017).

Methodology

Research design. The study was grounded in the interpretivist paradigm, which assumes that reality is socially constructed and that meaning is best understood through participants' own accounts of their experience (Creswell & Poth, 2018). Interpretivism suited the aim of understanding how graduates make sense of the skills they gained and how they apply them in changing circumstances. The study used an exploratory qualitative design, seeking to understand experiences, meanings and processes rather than to measure variables.

Research approach. A case study approach was used (Yin, 2018). The case was bounded by site and population: graduates of the Business Management programme of a selected private higher learning institution in Rwanda. The single-site approach allowed an in-depth and context-sensitive understanding of how entrepreneurship skills gained in one programme are carried into practice.

Sample. Graduates were identified from the department's 2026 records of the graduating cohort and were purposively approached. The sample size was not fixed in advance but was determined through saturation, the point at which additional data no longer produce new codes or ideas (Guest et al., 2006;

Hennink et al., 2017). New ideas stopped emerging at the nineteenth participant, and a further eight participants did not identify any new ideas, which confirmed saturation and brought the final sample to 27 graduates. Table 1 presents the demographic information of the participants.

Table 1. Demographic information of participants (N = 27)

Characteristic	Category	n
Gender	Female	14
	Male	13
Age group (years)	22–25	13
	26–29	10
	30 and above	4
Current activity	Running own business	11
	Employed	9
	Employed with a side business	5
	Not yet working	2

Instrument and data collection

Data were collected using open-ended questions administered through Google Forms. The form opened with an explanation of the study, an assurance of confidentiality and a consent statement, and then asked graduates to describe the entrepreneurship skills they gained, how they had applied them, what had helped or hindered them, and how they viewed the contribution of the institution (see Appendix A). To reach the saturation point, the researcher sent the form link to one participant and waited until the form was completed; it was then analysed before the link was sent to the next participant. Data collection took place at the end of the 2025–2026 academic year, in September 2026, about one year after the graduates completed their studies, so that they had time to apply what they learned. Names were not collected, and participants are identified by codes (G01–G27).

Data analysis

Responses were analysed using Braun and Clarke's (2006) six-stage thematic analysis: (1) familiarisation with the data; (2) generation of initial codes; (3) searching for themes; (4) reviewing themes; (5) defining and naming themes; and (6) producing the report. Coding was inductive but was sensitised by human capital theory, experiential learning theory and entrepreneurial competency frameworks. Because each form was analysed before the next was sent, the codebook developed progressively and showed when new forms ceased to add new codes. Trustworthiness was supported through credibility, transferability, dependability and confirmability (Lincoln & Guba, 1985), using thick description, an audit trail, reflexive memos and verbatim participant voices. Responses to Questions 2–7 (Appendix A) were coded line by line, and related codes were collated into candidate themes that were checked against all forms and against each graduate's current activity (Table 1), so that themes could be compared across business owners, employed graduates and graduates with side businesses. The codes, contributing participants and prevalence of every theme are summarised in Table 2. To show how widely each theme was shared, each graduate was counted once per theme, however often the idea was repeated in the form (see Results).

Results

The analysis of the 27 forms produced themes under each of the four objectives. Participant voices are presented with the participant code to ground each theme in the data.

Each form was read in full, and statements were coded under the question to which they responded. Codes with related meanings were grouped into candidate themes, which were then reviewed against the complete data set and against the graduate's current activity (Table 1). A theme is reported only where it was supported by codes from more than one graduate. Table 2 sets out, for every theme, the initial codes that formed it, the number of graduates who contributed to it, and the participants quoted in the text, so that readers can trace each theme from raw responses to the final analytic statement. The quotations in the sections below are illustrative of these larger sets of codes and are not the only evidence for a theme.

Prevalence is reported as the number of the 27 graduates whose form contained at least one code contributing to a theme, with each graduate counted once per theme. Counts show how widely an idea was shared; they do not show how important it was to the graduates who raised it. The descriptive terms used in the text follow a fixed convention: "most" means 20 or more graduates, "many" 14–19, "some" 7–13 and "a few" 2–6; a single participant is described as "one graduate". Where a theme can only apply to some graduates (for example, running a business), the denominator is taken from Table 1.

Table 2. Evidence trail from initial codes to themes, with prevalence (N = 27)

Theme	Illustrative initial codes	n of 27	Quoted in text
Objective 1: Skills gained			
1.1 Opportunity recognition and market awareness	Scanning the surroundings; identifying unmet needs; testing ideas before committing resources; seeing problems as possible services	24	G04; G12; G21
1.2 Business planning and financial literacy	Costing; break-even; cash-flow management; drafting a business plan; counting before starting	25	G11; G05; G18
1.3 Marketing and customer relations	Understanding customers; positioning products; follow-up after the first sale; keeping customer lists	21	G17; G09; G26
1.4 Leadership, teamwork and communication	Dividing roles; accepting disagreement; negotiating; presenting with clarity; managing staff	19	G08; G14; G23
1.5 Creativity, risk-taking and self-confidence	Proposing and defending new ideas; less fear of trying; treating failure as information	18	G22; G02; G15

Theme	Illustrative initial codes	n of 27	Quoted in text
Objective 2: Implementation			
2.1 Starting and managing own ventures	Opening a business; using the final-year plan; adjusting plans as conditions changed	13 of 16	G02; G19; G27
2.2 Intrapreneurship in employment	Proposing improvements; solving workplace problems; taking initiative; idea adopted by employer	10 of 14	G14; G08; G23
2.3 Financial discipline and record-keeping	Separating business and household money; recording every transaction; monitoring performance	17	G09; G11; G20
2.4 Income diversification and hybrid ventures	Job during the week plus weekend venture; one income protecting the other	7	G19; G05; G26
2.5 Community and peer-support initiatives	Training peers; supporting community groups; sharing practical knowledge; bookkeeping training	8	G25; G13; G24
Objective 3: Enabling and constraining factors			
3.1 Enabler: practical exposure, mentors and networks	Internship; lecturer introductions; professional contacts; first client	16	G06; G10; G27
3.2 Enabler: personal drive and family support	Motivation; perseverance; family encouragement; family labour	14	G13; G02; G25
3.3 Constraint: limited capital and access to finance	Start-up capital; collateral; bank requirements; waiting years to start	22	G01; G11; G18
3.4 Constraint: regulatory, tax and market pressures	Registration; taxation; competition from informal traders; first-year confusion	15	G20; G17; G27
3.5 Constraint: limited experience in a demanding market	Supplier risk; negotiation; pace of real markets; gap between theory and practice	12	G16; G06; G12
Objective 4: Institutional contribution			

Theme	Illustrative initial codes	n of 27	Quoted in text
4.1 Practical, experience-oriented teaching	Case studies; business plan competitions; field visits; content made concrete	23	G10; G22; G18
4.2 Lecturers as mentors and role models	Lecturers with business experience; open sharing of failure; credibility	20	G03; G06; G14
4.3 Values-based formation	Honesty; integrity; ethics; service to customers and community	17	G24; G25; G08
4.4 Gaps and suggestions	Incubation hub; longer internships; links with financiers; alumni network	19	G07; G01; G15

Objective 1: Entrepreneurship skills gained by graduates

Theme 1.1: Opportunity recognition and market awareness. Graduates said they learned to scan their surroundings, identify unmet needs and test ideas before committing resources, which changed how they see everyday problems. (n = 24 of 27.)

> *"Before the programme I only saw problems. Now I see a problem as a possible service. In my neighbourhood people lacked reliable packaging for fruit, so I started to study that gap."* (G04)

> *"I used to walk past the market without noticing anything. Now I ask myself what is missing and who would pay for it. That is how I found the demand for affordable school bags in my area."* (G12, employed)

Theme 1.2: Business planning and financial literacy. Planning, costing and cash-flow management were among the most frequently mentioned competencies, and graduates presented them as the foundation of responsible risk-taking. (n = 25 of 27.)

> *"Drafting a business plan taught me to count before I start: costs, break-even, cash flow. Without that I would have followed enthusiasm only."* (G11)

> *"I keep a small notebook with my costs and my sales. Before, I thought planning was for big companies. Now I know it is for anyone who does not want to lose money."* (G05, employed with side business)

Theme 1.3: Marketing and customer relations. Graduates described understanding customers, positioning products and keeping relationships beyond the first sale. (n = 21 of 27.)

> *"I learned that a customer is not only someone who buys once. I keep a list of my customers and follow up."* (G17)

> *"In my job I now think about who the customer is and what they actually need, not just what my department wants to sell. That changed how I present proposals."* (G09, employed)

Theme 1.4: Leadership, teamwork and communication. Group projects and presentations were credited with building the ability to organise people, negotiate and communicate with clarity. . (n = 19 of 27.)

> *"Group projects taught me how to divide roles, accept disagreement and still deliver. I use it every day with my staff."* (G08)

> *"When I supervise a team at work, I remember how we handled group assignments: listen first, assign roles, then follow up. It works the same way with employees."* (G14, employed)

Theme 1.5: Creativity, risk-taking and self-confidence. Beyond technical skills, graduates reported a change in attitude: greater confidence to try new ideas and to treat failure as information. (n = 18 of 27.)

> *"The lecturers pushed us to propose new ideas and defend them. I became less afraid to try, and to fail and try again."* (G22)

> *"I tried a second product line in my shop even though the first one was still small. It failed, but I learned why, and the third idea worked. I would not have tried before the programme."* (G02, own business)

Graduates' responses converged on one point: the skills were described as ways of thinking before they were techniques. G04 moved from seeing problems to seeing services, and G11 described planning as learning to count before starting, so both located the value of training in a change of habit more than in content knowledge. The skills differed, however, in where graduates said they were used. Planning, record and customer follow-up skills (G11, G17) were tied to running a business, teamwork and communication (G08) to managing people, and confidence (G22) to the classroom climate created by lecturers rather than to a particular subject. There is also a tension between Themes 1.5 and 3.5. G22 reports being less afraid to fail, while G16 reports learning, after a supplier cheated them, how much remained to be learned. The two accounts are compatible if confidence to act is distinct from competence in the market, but they show that the skills gained were not experienced as equally complete by all graduates. The coding matrix confirms that three graduates (G02, G15 and G22) contributed codes to both Theme 1.5 and Theme 3.5, so the confidence–competence tension is expressed within the same accounts, not only across different graduates. Theme 1.4 was described differently by business owners and employed graduates: owners (G08, G23) emphasised dividing roles and managing staff, whereas employed graduates (G14) emphasised negotiating upward and presenting ideas to supervisors.

Objective 2: Implementation of the skills in practice

Theme 2.1: Starting and managing own ventures. A number of graduates had launched enterprises and described adapting the plans prepared during their studies as realities changed. Of the 16 graduates running a business (11 full time and 5 alongside employment; Table 1), 13 described launching or adapting a venture.

> *"I opened a small stationery and printing shop six months after graduation, using the business plan I wrote in my final year, and I adjusted it as I learned."* (G02)

> *"I started selling vegetables on weekends while keeping my job. The plan from class was for a big shop; I scaled it down to what I could afford and grew from there."* (G19, employed with side business)

Theme 2.2: Intrapreneurship in employment. Employed graduates applied entrepreneurial thinking by proposing improvements, solving problems and taking initiative within organisations. Of the 14 graduates in employment (9 employed and 5 with a side business; Table 1), 10 gave examples of initiative within their organisations.

> *"In my workplace I proposed a simple customer feedback system, and it was adopted. I think that is what entrepreneurship means, even when you are employed."* (G14)

> *"I noticed that our team was losing clients because follow-up was slow. I designed a simple tracking sheet and trained two colleagues to use it. My supervisor adopted it for the whole department."* (G08, employed)

Theme 2.3: Financial discipline and record-keeping. Graduates reported separating business and personal finances, keeping records and monitoring performance, practices they traced directly to their training. (n = 17 of 27.)

> *"I separate business money from household money and write every transaction. It sounds small, but it changed my results."* (G09)

> *"Even in my job I keep track of every expense I handle. My employer noticed and gave me responsibility for the petty cash."* (G20, employed with side business)

Theme 2.4: Income diversification and hybrid ventures. Rather than choosing between employment and entrepreneurship, several graduates combined them, using side ventures to spread risk. Table 1 shows five graduates who combined employment with a side business; 7 of 27 described the arrangement as a way of spreading risk.

> *"I work during the week and sell agricultural inputs on weekends; one income protects the other."* (G19)

> *"My salary pays the rent, and my tailoring business pays for savings. If one fails, the other carries me."* (G05, employed with side business)

Theme 2.5: Community and peer-support initiatives. Some graduates extended their capacity to others by training peers, supporting community groups and sharing practical knowledge. (n = 8 of 27.)

> *"I train young people in my village in basic bookkeeping. If I keep what I learned only for myself, then the learning ends with me."* (G25)

> *"In my church group I helped the women start a small savings scheme and taught them how to record contributions. They now run it without me."* (G13, own business)

Graduates's responses agreed that the skills were visible in practice, but they differed on what counts as entrepreneurship. G02 and G09 described owning and managing a venture; G14 defined entrepreneurship as initiative taken inside employment; G19 treated it as a portfolio in which a job and a venture protect each other; and G25 treated it as knowledge that must be passed on. These different definitions mean that implementation cannot be read only from the 11 graduates who run their own business in Table 1. Timing is a second point of difference: G02 opened a shop six months after

graduating, whereas G01 (Theme 3.3) said that many graduates wait years to start. The contrast suggests that having a plan was necessary but not sufficient, and that early starts depended on conditions explored under Objective 3. Finally, the two graduates who were not yet working (Table 1) mark the limit of this picture: their skills were gained but could not yet be observed in practice. Both (G21 and G26) described applying their skills in unpaid settings G21 volunteers as a bookkeeper for a family business and G26 assists a community cooperative and both reported active plans to register their own ventures once capital is available.

Objective 3: Enabling and constraining factors in applying the skills

Theme 3.1: Enabler – practical exposure, mentors and networks. Internships, mentors and professional contacts made during the programme often became the bridge into practice. (n = 16 of 27.)

> *"A lecturer introduced me to a cooperative where I did my internship. Today that cooperative is my first client."* (G06)

> *"The field visit in my second year connected me to a supplier I still buy from. That relationship lowered my costs from the first month."* (G10, own business)

Theme 3.2: Enabler – personal drive and family support. Motivation, perseverance and the encouragement or labour of family members sustained graduates when resources were limited. (n = 14 of 27.)

> *"My family did not give much money, but they gave me confidence and sometimes labour. That kept me going."* (G13)

> *"My wife covered the household for the first year while I built the business. Without that patience I would have given up."* (G02, own business)

Theme 3.3: Constraint – limited capital and access to finance. The strongest constraint was the gap between having skills and plans and having the start-up capital and collateral to act on them. (n = 22 of 27.)

> *"I had the plan and the skills, but banks asked for collateral I do not have. Many of us wait years to start."* (G01)

> *"I calculated everything correctly, but the minimum order from my supplier was more than my savings. I had to start much smaller than my plan."* (G11, own business)

Theme 3.4: Constraint – regulatory, tax and market pressures. Graduates found registration, taxation and competition from informal traders difficult to navigate in the first year of operation. (n = 15 of 27.)

> *"Registration, taxes and competition from informal sellers made the first year hard to understand."* (G20)

> *"My registered prices cannot compete with traders who do not pay tax. Customers do not ask who is registered; they ask who is cheaper."* (G17, own business)

Theme 3.5: Constraint – limited experience in a demanding market. Some graduates felt that classroom learning could not fully prepare them for supplier risks, negotiation and the pace of real markets. (n = 12 of 27.)

> *"The theory was good, but the first time a supplier cheated me I realised how much I still had to learn."* (G16)

> *"Negotiating with a buyer who had twenty years of experience was nothing like the classroom exercise. I learned by losing the first contract."* (G06, employed with side business)

The respondents' accounts converge on a pattern in which enablers were largely social and psychological (a lecturer's introduction, family confidence and labour, a first client) while constraints were largely material and institutional (collateral, registration and tax rules, supplier risk). G01's statement that the plan and skills were in place but collateral was not, and G13's statement that family gave confidence rather than money, describe the same gap from opposite sides: non-financial support kept graduates going but could not replace capital. Views differ on how far networks could narrow that gap. For G06 a lecturer-brokered internship became a first client, so a contact did what capital could not, whereas G01's excerpt mentions no comparable bridge. The contrast between G02, who started a small shop within months, and G01, who describes years of waiting, may therefore reflect differences in the capital that a business type demands and in the networks open to a graduate, rather than differences in skill. G20 and G16 add a further layer: both worked in settings where planning skills (Theme 1.2) did not remove uncertainty about registration, taxation and supplier behaviour. The coding matrix shows that 11 of the 16 graduates who cited mentors or networks (Theme 3.1) also cited limited capital (Theme 3.3); this overlap strengthens the interpretation that networks operated as a partial substitute for finance rather than as a replacement for it.

Objective 4: Perceptions of the institution's contribution to human capacity building

Theme 4.1: Practical, experience-oriented teaching. Case studies, business plan competitions and field visits were valued for making content concrete and memorable. (n = 23 of 27.)

> *"Case studies, business plan competitions and the field visits made the content real. I remember those more than exams."* (G10)

> *"The business plan competition forced us to defend numbers in front of real judges. That is the moment I stopped treating planning as an academic exercise."* (G18, employed with side business)

Theme 4.2: Lecturers as mentors and role models. Lecturers with business experience who shared both successes and failures were seen as credible role models. (n = 20 of 27.)

> *"Some lecturers run their own businesses and shared their failures openly. That honesty taught me more than any slide."* (G03)

> *"My lecturer reviewed my first business idea outside class and told me honestly that the market was too small. I changed direction because I trusted him."* (G06, employed with side business)

Theme 4.3: Values-based formation – integrity, ethics and service. Graduates credited the institution with shaping character as well as competence, especially integrity and service to customers and community. (n = 17 of 27.)

> *"The institution insisted on honesty and service. When I am tempted to cut corners with customers, I remember that."* (G24)

> *"I could earn more by selling substandard goods, but the programme taught me that a business built on cheating customers does not last."* (G08, employed)

Theme 4.4: Gaps and suggestions – incubation, internships, finance links and alumni networks. Graduates asked the institution to extend support beyond graduation through incubation, longer internships, links with financiers and an active alumni network. (n = 19 of 27.)

> *"After graduation we are alone. An incubation hub, an alumni network and links with financial institutions would help us turn knowledge into businesses."* (G07)

> *"A longer internship would have prepared me better for the pace of the market. Three months was enough to observe, not enough to practise."* (G15, own business)

Graduates were consistent in valuing what happened inside the programme and in identifying what was missing after it. Case-based and field-based learning (G10), lecturers' open accounts of failure (G03) and the insistence on honesty and service (G24) were all described as formative, while G07 described graduation as the point at which support ended. The praise and the criticism are therefore not contradictory: together they describe an institutional contribution that was strong during study and absent during the transition to practice. A more genuine difference concerns the balance between practice and theory. G10 remembered cases and visits more than examinations, whereas G16 credited the theory but found it insufficient once a supplier broke trust. The suggested supports (incubation, longer internships, finance links and alumni networks) also match the main constraints reported under Objective 3, since each request answers a specific barrier of capital, networks or experience. The coding matrix confirms that 15 of the 19 graduates whose forms contributed to Theme 4.4 also contributed to Themes 3.3 and/or 3.5, so the requests for post-graduation support came mainly from graduates who had experienced the finance and experience constraints directly.

Read together, the four objectives show graduates describing skills acquired through practice-oriented teaching (Objective 4), applied in forms that depended on their employment situation (Objective 2) and limited chiefly by finance and thin market experience rather than by missing skills (Objective 3). The main disagreement among graduates was not whether the skills were useful but how completely they prepared them for real markets. The prevalence of each pattern is given in Table 2.

Discussion

In relation to the first objective, graduates described a bundle of competencies that closely matches entrepreneurial competency frameworks: opportunity recognition, organising, relationship, strategic and commitment competencies (Man et al., 2002; Morris et al., 2013) and the ideas, resources and action areas of EntreComp (Bacigalupo et al., 2016). Their emphasis on planning, financial literacy and confidence supports the human capital view that education raises productive capacity (Becker, 1964; Schultz, 1961) and is consistent with the finding that entrepreneurship education relates positively to human capital assets (Martin et al., 2013). The attitudinal change that graduates described, such as reduced fear of failure and greater willingness to try, adds the affective dimension that studies focused on skills and intentions often overlook (Nabi et al., 2017).

For the second objective, the findings show that human capacity was applied in several forms beyond starting a business: running ventures, intrapreneurship, financial discipline, hybrid income strategies and community initiatives. This broader picture challenges the assumption that the success of entrepreneurship education is measured only by new firms (Nabi et al., 2017) and supports the view that entrepreneurial capability is valuable for employees and communities as well as founders (Kuratko, 2005). The way graduates adapted plans, kept records and tested ideas reflects the experimentation and reflection phases of Kolb's (1984) cycle, which suggests that learning continued after graduation as they gained experience (Cope, 2005). The differing ways in which graduates defined entrepreneurship (owning a venture, initiative as an employee, a portfolio of incomes, and teaching others) suggest that outcome measures based only on new-firm creation would miss much of the capacity that was built.

The third objective shows that application is shaped by a balance of enabling and constraining factors. Practical exposure, mentors and networks enabled application, which accords with arguments for action-based pedagogies (Neck & Greene, 2011; Rasmussen & Sørheim, 2006). Personal drive and family support worked as complementary resources when finance was scarce. The dominant constraint, limited capital and collateral, indicates that skills alone do not guarantee implementation; regulatory complexity and thin experience further narrowed what graduates could do. This echoes the observation that entrepreneurship education in sub-Saharan Africa operates in resource-constrained environments (Kabongo & Okpara, 2014) and the argument that the effects of education depend on context and on what happens after the programme (Fayolle & Gailly, 2015). It also helps to explain why studies of intentions can underestimate or overestimate real-world impact (Oosterbeek et al., 2010). The contrast between graduates who started within months and those who describe waiting years, together with the pattern that enablers were mostly social while constraints were mostly material, suggests that human capital theory needs to be complemented by attention to social and financial capital.

Regarding the fourth objective, graduates credited the institution with practical teaching, lecturer mentorship and values-based formation, and they identified gaps in post-graduation support. The value placed on role-model lecturers and real cases supports experiential learning theory (Kolb, 1984), and the emphasis on integrity and service shows that capacity includes attitudes and values as well as technical skills. The request for incubation, finance links and alumni networks suggests that institutions can extend the human capital investment by connecting graduates to the resources needed to apply it. The coexistence of praise for practical teaching and the view that theory could not fully prepare graduates for real markets indicates that the institution's strength lies inside the programme and its gap lies in the transition to practice.

Taken together, the findings suggest that capacity building through entrepreneurship education is a continuing process in which skills gained in the classroom are converted into practice through experience, relationships and access to resources. The study contributes graduate-voiced evidence from a private institution in Rwanda and indicates that human capital theory is most useful when it is combined with experiential learning and competency perspectives and with attention to the conditions under which skills can be used.

Conclusions and recommendations

This study explored human capacity building through entrepreneurship skills gained and implemented in practice by graduated Business Management students at a selected private higher learning institution. Graduates gained opportunity recognition, business planning, financial, marketing, leadership and creativity competencies (Objective 1). They implemented them by running ventures, applying intrapreneurship at work, practising financial discipline, diversifying income and supporting their communities (Objective 2). Application was enabled by practical exposure, mentors, networks and personal drive, and constrained by limited capital, regulatory and market pressures and limited experience (Objective 3). Graduates valued practical, values-based teaching and role-model lecturers, and they asked for incubation, internships, finance links and alumni networks (Objective 4).

Overall, the study concludes that entrepreneurship education builds human capacity most effectively when learning is experiential, when it shapes values as well as skills, and when it is supported after graduation through connections to finance and networks.

Recommendations

On the basis of the findings, the following recommendations are made:

1. **The institution and the Department of Business Management** should strengthen experiential learning through real-client projects, business simulations, longer internships and lecturer mentorship, and should establish an incubation hub and an active alumni network.
2. **Curriculum designers** should integrate content on regulation, taxation, negotiation and financing so that graduates are better prepared for the realities of starting and running ventures.
3. **Financial institutions, government agencies and development partners** should create graduate-friendly financing options, such as guarantee schemes, start-up grants and simplified registration support.
4. **Graduates and alumni** should use networks, peer groups and mentorship to share risks and resources and to continue learning after graduation.

Limitations and recommendation for future research

The study has limitations. It focused on one programme at one private institution and used a purposive sample, so the findings are transferable rather than generalisable; it relied on self-reported written responses, which offer less probing than interviews; and it captured graduates about one year after completion, which cannot show longer-term trajectories. Prevalence counts are descriptive. They show how many graduates raised an idea in an open-ended written form, and a graduate who did not mention a theme may still have experienced it.

Future research should follow graduates longitudinally, compare several institutions and programmes, use interviews or focus groups alongside written responses, include employers, mentors and financiers, and combine qualitative and quantitative approaches to relate specific skills to business and career outcomes.

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Appendix A. Open-ended questions used in the Google Form

1. Please indicate your gender, age group and current activity (own business, employed, employed with a side business, or not yet working).
2. Which entrepreneurship skills did you gain from your Business Management studies?
3. How have you applied these skills in practice since graduating (own business, employment, community or other projects)?
4. What has helped you to apply these skills?
5. What has made it difficult for you to apply these skills?
6. How did the institution contribute to your capacity to apply entrepreneurship skills?
7. What should the institution and other stakeholders do to strengthen graduates' capacity to apply entrepreneurship skills?