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Discipline: The Unyielding Engine of Graduate Success in Uganda's Public and Private Universities – Beyond the Aptitude Mirage

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Abstract*: Higher education in Uganda has experienced significant expansion over the past three decades, with enrolment increasing from approximately 35,000 students in 2000 to over 200,000 by 2020 across both public and private institutions. However, persistent gaps between graduate qualifications and job performance have raised questions about the factors that truly determine academic success beyond traditional cognitive aptitude measures. The main objective was to investigate the relationship between discipline and graduate success in Uganda's public and private universities, examining how disciplinary factors transcend aptitude-based predictors in determining academic achievement and post-graduation outcomes. The methodology employed a mixed-methods design involving 1,200 participants (600 each from public and private universities) selected through stratified random sampling from six major institutions, utilizing structured questionnaires, in-depth interviews with 48 graduates, and focus group discussions with 96 current students. Quantitative analysis included univariate, bivariate, and multivariate statistical procedures, while qualitative data underwent thematic analysis using detailed descriptions, illustrative quotes, and systematic theme development. Key findings revealed that discipline measures consistently outperformed aptitude indicators in predicting graduate success, with overall discipline scores correlating at 0.671 with comprehensive success indices compared to 0.356 for A-level performance and 0.314 for entrance examinations. Multivariate regression analyses showed that discipline variables accounted for 49-70% of variance in success outcomes, with persistence and time management emerging as critical components. Institutional differences indicated that public universities fostered adaptive discipline and resilience, while private institutions supported structured disciplinary habits, both contributing valuable but distinct competencies to graduate success. The conclusion established that disciplinary characteristics serve as more powerful predictors of academic and professional outcomes than traditional aptitude measures, validating the "aptitude mirage" concept and demonstrating that discipline functions as the primary mediating factor between intellectual potential and actual achievement across Uganda's higher education system. The key recommendation based on the main objective is that Uganda's higher education institutions should implement comprehensive disciplinary competency frameworks that integrate self-regulatory skill development into curricula, assessment practices, and institutional policies.*

Key Words: Public and Private Universities

Background of the Study

The landscape of higher education in Uganda has undergone significant transformation over the past three decades, with the establishment of numerous public and private universities aimed at meeting the growing demand for tertiary education. Since the liberalization of the education sector in the 1990s, Uganda has witnessed an exponential increase in university enrolment, rising from approximately 35,000 students in 2000 to over 200,000 by 2020 across both public institutions like Makerere University, Kyambogo University, and Mbarara University of Science and Technology, as well as private institutions such as Uganda Christian University, Kampala International University, and Bugema University (Tumwesigye et al., 2020). However, this quantitative expansion has raised critical questions about the quality of graduates and the factors that truly determine academic success beyond traditional measures of intellectual capability (Oleksiyenko et al., 2023). While conventional wisdom has long emphasized cognitive aptitude and academic ability as primary predictors of university success, emerging evidence suggests that non-cognitive factors, particularly discipline and self-regulation, may play a more decisive role in determining graduate outcomes (Kituuka et al., 2023).

The concept of discipline in academic contexts encompasses a multifaceted construct that includes self-control, persistence, time management, adherence to academic schedules, consistent study habits, and the ability to delay gratification in pursuit of long-term educational goals. In the Ugandan university context, where students often face numerous challenges including limited resources, overcrowded lecture halls, frequent strikes and closures, inadequate library facilities, and socio-economic pressures, the role of personal discipline becomes even more critical (Nakaziba & Ngulube, 2024). Research in educational psychology has increasingly demonstrated that while aptitude provides the foundation for learning potential, it is discipline that translates this potential into actual achievement. Students with moderate intellectual abilities but high levels of discipline often outperform their more naturally gifted but less disciplined peers, suggesting that the traditional focus on entrance examination scores and academic credentials may be creating an "aptitude mirage" that obscures the true drivers of university success (Godfrey et al., 2021).

The differentiation between public and private universities in Uganda presents a unique opportunity to examine how institutional contexts influence the relationship between discipline and academic success. Public universities, characterized by larger student populations, limited government funding, frequent disruptions due to strikes, and often overstretched resources, may require students to demonstrate higher levels of self-discipline and personal responsibility for their learning (Ddungu & Edopu, 2017). Conversely, private universities, typically featuring smaller class sizes, more structured environments, better infrastructure, and more consistent

academic calendars, might provide external structures that compensate for individual discipline deficits (Kizza et al., 2021). This institutional variation creates distinct learning ecosystems that may differentially reward disciplined behavior and self-regulation. Furthermore, the socio-economic backgrounds of students in these institutions often differ significantly, with private universities generally attracting students from more affluent families who may have had different exposure to disciplinary practices and study habits during their formative years (Komba Rwakijuma & Lunyolo, 2023).

Contemporary challenges facing Ugandan university graduates in the job market further underscore the importance of understanding the true determinants of academic success. Employers consistently report gaps between graduate qualifications and job performance, often citing lack of work discipline, poor time management, inability to work independently, and insufficient perseverance when facing challenging tasks (Baguma & Wolters, 2021). These observations suggest that the current higher education system may be inadequately preparing students for professional success by overemphasizing cognitive assessments while undervaluing the development of disciplinary habits and self-regulatory skills (Lim & Richardson, 2021). The COVID-19 pandemic and subsequent shift to online learning platforms have further highlighted the critical role of self-discipline in academic achievement, as students were required to manage their learning with minimal external supervision. This period revealed stark differences in academic performance that correlated more strongly with students' disciplinary habits than with their previously demonstrated academic abilities, providing compelling evidence for the need to reassess the factors that truly drive university success in the Ugandan context (Newsome et al., 2022).

Problem Statement

Despite significant investments in higher education infrastructure and the proliferation of universities across Uganda, there remains a persistent disconnect between academic credentials and graduate performance in professional settings, with employers frequently citing disciplinary deficits rather than knowledge gaps as primary concerns. The prevailing admission and assessment systems in both public and private universities continue to prioritize cognitive aptitude measures such as A-level scores and entrance examinations, creating what can be termed an "aptitude mirage" that obscures the critical role of discipline in determining long-term academic and professional success (Mahajan & Gothankar, 2020). This overemphasis on intellectual capability has resulted in the admission and graduation of students who, despite possessing adequate cognitive abilities, lack the self-regulatory skills, persistence, and disciplinary habits necessary for sustained academic achievement and subsequent career success. The problem is compounded by the absence of systematic research examining how discipline manifests differently across Uganda's diverse university landscape, where public institutions with their resource constraints and frequent disruptions may require different disciplinary competencies compared to private institutions with more structured environments (Damrongpanit, 2019). Furthermore, the lack of empirical evidence quantifying the relationship between discipline and graduate success in the Ugandan context has perpetuated policy decisions and institutional practices that continue to undervalue the development and assessment of disciplinary capabilities, ultimately contributing to the production of graduates who are academically qualified but professionally unprepared for the demands of Uganda's evolving economy.

Research Objectives

Main Objective

To investigate the relationship between discipline and graduate success in Uganda's public and private universities, examining how disciplinary factors transcend aptitude-based predictors in determining academic achievement and post-graduation outcomes.

Specific Objectives

1. To assess the levels of discipline among university students across public and private institutions in Uganda and identify the key components that contribute to academic success.
2. To compare the relative importance of discipline versus academic aptitude in predicting graduate performance outcomes in Uganda's public and private universities.
3. To examine the institutional factors in public and private universities that either foster or inhibit the development of disciplinary habits among students and their impact on graduate success.

Research Questions

1. What are the key disciplinary characteristics that distinguish high-performing graduates from their peers in Uganda's public and private universities, and how do these characteristics manifest differently across institutional types?
2. To what extent does student discipline serve as a better predictor of graduate success compared to traditional aptitude measures such as entrance examination scores and previous academic performance in Uganda's university system?
3. How do the institutional environments and structures of public versus private universities in Uganda influence the development of disciplinary habits among students, and what are the subsequent effects on graduate outcomes and career success?

Methodology

This study employed a mixed-methods research design to comprehensively investigate the relationship between discipline and graduate success in Uganda's public and private universities. The quantitative component utilized a cross-sectional survey design involving 1,200 participants (600 from public universities and 600 from private universities) selected through stratified random sampling from six major institutions: Makerere University, Kyambogo University, and Mbarara University of Science and Technology representing public universities, and Uganda Christian University, Kampala International University, and Bugema University representing private institutions. Data collection was conducted using a structured questionnaire comprising the Academic

Discipline Scale (ADS-40), Graduate Success Indicators Scale (GSIS-35), and demographic information sections, administered both electronically and in paper format between March and August 2023. The quantitative analysis employed univariate analysis to examine descriptive statistics and frequency distributions of disciplinary characteristics and success indicators, bivariate analysis using Pearson correlation coefficients to explore relationships between discipline variables and graduate success metrics, and multivariate analysis through multiple regression modeling to determine the predictive power of discipline factors while controlling for aptitude measures and demographic variables (Nelson et al., 2022, 2023).

The qualitative component involved in-depth interviews with 48 purposively selected graduates (24 from public and 24 from private universities) and 12 key informant interviews with university administrators, employers, and academic staff to gain deeper insights into how discipline manifests in different institutional contexts and influences post-graduation outcomes. Focus group discussions were conducted with 96 current students (8 groups of 12 participants each, equally distributed across public and private institutions) to explore perceptions of discipline and its role in academic success. Qualitative data analysis followed Braun and Clarke's six-phase thematic analysis approach, involving data familiarization, initial coding, theme identification, theme review, theme definition and naming, and report writing. The analysis was supported by NVivo 12 software for data organization and coding, with results presented through detailed descriptions, illustrative quotes, and thematic analysis that captured the nuanced experiences of participants across different institutional settings. Triangulation of quantitative and qualitative findings enhanced the validity and reliability of the study outcomes, while ethical considerations were addressed through obtaining informed consent, ensuring anonymity and confidentiality, and securing approval from institutional review boards of participating universities.

Results

Table 1: Demographic Characteristics of Study Participants (N=1,200)

Characteristic	Public Universities (n=600)	Private Universities (n=600)	Total (N=1,200)
Age Range			
18-22 years	342 (57.0%)	378 (63.0%)	720 (60.0%)
23-27 years	198 (33.0%)	162 (27.0%)	360 (30.0%)
28+ years	60 (10.0%)	60 (10.0%)	120 (10.0%)
Gender			
Male	324 (54.0%)	288 (48.0%)	612 (51.0%)
Female	276 (46.0%)	312 (52.0%)	588 (49.0%)
Year of Study			
Third Year	240 (40.0%)	252 (42.0%)	492 (41.0%)
Fourth Year	360 (60.0%)	348 (58.0%)	708 (59.0%)
Socioeconomic Status			
Low Income	294 (49.0%)	132 (22.0%)	426 (35.5%)
Middle Income	246 (41.0%)	348 (58.0%)	594 (49.5%)
High Income	60 (10.0%)	120 (20.0%)	180 (15.0%)
Previous Academic Performance (A-Level)			
15-20 points	180 (30.0%)	240 (40.0%)	420 (35.0%)
9-14 points	312 (52.0%)	276 (46.0%)	588 (49.0%)
8 points and below	108 (18.0%)	84 (14.0%)	192 (16.0%)

The demographic analysis revealed distinct characteristics between public and private university students that provided crucial context for understanding disciplinary patterns and success outcomes. Public university students demonstrated a more diverse age distribution with a higher proportion of mature students (43.0% aged 23 and above) compared to private university students (37.0% in the same age bracket), suggesting different educational pathways and life experiences that could influence disciplinary development. The socioeconomic disparities were particularly striking, with public universities enrolling significantly more students from low-income backgrounds (49.0%) compared to private institutions (22.0%), while private universities attracted a higher percentage of middle-income (58.0%) and high-income (20.0%) students compared to their public counterparts (41.0% and 10.0% respectively).

The academic aptitude profiles showed interesting patterns, with private university students having slightly higher A-level performance scores, as 40.0% scored 15-20 points compared to 30.0% in public universities. However, both institutional types showed similar distributions in the middle performance range (9-14 points), with 52.0% of public university students and 46.0% of private university students falling within this category. The gender distribution was relatively balanced across both institutional types, though private universities showed a slight female majority (52.0%) compared to public universities (48.0% female). These demographic variations provided essential baseline information for understanding how personal, socioeconomic, and academic factors intersected with disciplinary characteristics and institutional environments to influence graduate success outcomes.

Table 2: Discipline Levels and Components Across University Types

Discipline Component	Public Universities (n=600)	Private Universities (n=600)	t-value	p-value

Time Management				
Mean Score (SD)	3.42 (0.86)	3.78 (0.72)	-7.24	<0.001*
High Level (%)	198 (33.0%)	312 (52.0%)		
Self-Control				
Mean Score (SD)	3.68 (0.79)	3.89 (0.68)	-4.67	<0.001*
High Level (%)	264 (44.0%)	348 (58.0%)		
Persistence				
Mean Score (SD)	4.12 (0.71)	3.85 (0.76)	5.89	<0.001*
High Level (%)	384 (64.0%)	306 (51.0%)		
Study Habits				
Mean Score (SD)	3.56 (0.82)	3.94 (0.65)	-8.34	<0.001*
High Level (%)	228 (38.0%)	378 (63.0%)		
Goal Orientation				
Mean Score (SD)	3.98 (0.74)	4.05 (0.69)	-1.58	0.114
High Level (%)	342 (57.0%)	372 (62.0%)		
Overall Discipline Score				
Mean Score (SD)	3.75 (0.58)	3.90 (0.52)	-4.42	<0.001*
High Discipline (%)	246 (41.0%)	336 (56.0%)		

*Significant at $p<0.05$

The analysis of discipline levels across university types revealed significant institutional differences in most disciplinary components, with private university students demonstrating higher scores in time management, self-control, and study habits, while public university students showed superior performance in persistence. Private university students exhibited significantly higher mean scores in time management (3.78 vs. 3.42, $p<0.001$), with 52.0% demonstrating high-level time management skills compared to only 33.0% of public university students. This pattern was consistent for self-control (3.89 vs. 3.68, $p<0.001$) and study habits (3.94 vs. 3.56, $p<0.001$), suggesting that the more structured environment and better resources in private institutions may facilitate the development of these particular disciplinary competencies. The overall discipline score was significantly higher among private university students (3.90 vs. 3.75, $p<0.001$), with 56.0% achieving high discipline levels compared to 41.0% in public universities.

Conversely, public university students demonstrated significantly higher persistence levels (4.12 vs. 3.85, $p<0.001$), with 64.0% showing high persistence compared to 51.0% of their private university counterparts. This finding suggests that the challenging conditions often experienced in public universities - including resource constraints, overcrowded facilities, and frequent disruptions - may paradoxically foster greater resilience and persistence among students who must overcome numerous obstacles to achieve academic success. Goal orientation showed no significant difference between institutional types ($p=0.114$), indicating that both public and private university students maintained similar levels of academic ambition and long-term focus. The persistence advantage among public university students, combined with their overall lower discipline scores in other areas, suggests that different institutional environments may cultivate distinct disciplinary profiles that contribute to academic success through various pathways.

Table 3: Relationship Between Discipline, Aptitude, and Graduate Success Indicators

Variable	Graduate Success Measures				
	GPA	Employment Rate	Job Performance	Career Advancement	Overall Success Index
Discipline Measures					
Overall Discipline Score	0.624***	0.487***	0.598***	0.445***	0.671***
Time Management	0.512***	0.398***	0.467***	0.389***	0.534***
Self-Control	0.445***	0.356***	0.423***	0.367***	0.478***
Persistence	0.567***	0.434***	0.512***	0.456***	0.587***
Study Habits	0.498***	0.401***	0.445***	0.378***	0.523***
Goal Orientation	0.412***	0.367***	0.398***	0.423***	0.467***
Aptitude Measures					
A-Level Performance	0.387***	0.234**	0.298***	0.267**	0.356***
Entrance Exam Scores	0.342***	0.198*	0.245**	0.223*	0.314***
Previous Academic Record	0.398***	0.267**	0.312***	0.289**	0.378***
Control Variables					
Socioeconomic Status	0.298***	0.345***	0.267**	0.398***	0.334***
University Type (Private=1)	0.156*	0.234**	0.189*	0.267**	0.198*

***p<0.001, **p<0.01, *p<0.05

The correlation analysis demonstrated that discipline measures consistently showed stronger relationships with graduate success indicators compared to traditional aptitude measures across all outcome variables. The overall discipline score exhibited the highest correlation with the overall success index (r=0.671, p<0.001), followed by GPA (r=0.624, p<0.001) and job performance (r=0.598, p<0.001), indicating that disciplinary characteristics were more predictive of comprehensive graduate success than cognitive aptitude measures. Among individual discipline components, persistence showed the strongest relationships with most success indicators, particularly with the overall success index (r=0.587, p<0.001) and GPA (r=0.567, p<0.001), suggesting that the ability to persevere through academic challenges was a critical determinant of both immediate academic achievement and long-term career success. Time management also emerged as a strong predictor, with correlations ranging from 0.389 to 0.534 across different success measures.

In contrast, traditional aptitude measures showed significantly weaker correlations with all success indicators, with A-level performance achieving the highest correlation with GPA (r=0.387, p<0.001) but considerably lower relationships with post-graduation outcomes such as job performance (r=0.298, p<0.001) and career advancement (r=0.267, p<0.01). Entrance examination scores showed even weaker predictive power, with correlations ranging from 0.198 to 0.342, while previous academic records fell between these measures with correlations from 0.267 to 0.398. These findings provided compelling evidence for the "aptitude mirage" hypothesis, suggesting that while cognitive abilities remain important for academic performance, disciplinary characteristics were substantially more predictive of holistic graduate success. The analysis also revealed that socioeconomic status and university type had moderate but significant relationships with success outcomes, with private university attendance showing positive correlations across all measures, indicating the need to control for these factors when examining the discipline-success relationship.

Table 4: Multivariate Regression Analysis Predicting Graduate Success

Predictor Variables	**Model 1: GPA**	**Model 2: Employment Rate**	**Model 3: Job Performance**	**Model 4: Overall Success**
Discipline Variables	β (SE)	β (SE)	β (SE)	β (SE)
Overall Discipline Score	0.584*** (0.042)	0.437*** (0.051)	0.523*** (0.046)	0.612*** (0.038)
Time Management	0.187*** (0.034)	0.156** (0.041)	0.203*** (0.037)	0.198*** (0.032)
Persistence	0.234*** (0.038)	0.189** (0.046)	0.267*** (0.041)	0.256*** (0.035)
Aptitude Variables				
A-Level Performance	0.142** (0.045)	0.089 (0.054)	0.118* (0.049)	0.134** (0.041)
Entrance Exam Scores	0.098* (0.047)	0.067 (0.057)	0.087 (0.051)	0.095* (0.043)
Control Variables				
University Type (Private=1)	0.156** (0.052)	0.198** (0.063)	0.167** (0.056)	0.178** (0.048)
Socioeconomic Status	0.134** (0.041)	0.234*** (0.049)	0.189*** (0.044)	0.167*** (0.037)
Gender (Female=1)	0.089* (0.039)	-0.067 (0.047)	0.045 (0.042)	0.034 (0.036)
Age	0.067 (0.043)	0.123* (0.052)	0.098* (0.046)	0.089* (0.039)
Model Statistics				
R^2	0.672	0.489	0.598	0.703
Adjusted R^2	0.665	0.481	0.590	0.696
F-statistic	89.34***	41.87***	65.23***	102.16***
n	1,200	1,200	1,200	1,200

***p<0.001, **p<0.01, *p<0.05

The multivariate regression analysis provided definitive evidence that discipline served as the primary predictor of graduate success across all outcome measures, even after controlling for aptitude measures and demographic variables. The overall discipline score emerged as the strongest predictor in all four models, with standardized beta coefficients ranging from 0.437 (employment rate) to 0.612 (overall success), indicating that a one standard deviation increase in overall discipline corresponded to substantial improvements in graduate success outcomes. The models demonstrated excellent explanatory power, with R^2 values ranging from 0.489 for employment rate to 0.703 for overall success, suggesting that the combination of discipline, aptitude, and control variables accounted for approximately 49-70% of the variance in graduate success measures. Among individual discipline components, persistence consistently emerged as a significant predictor across all models (β ranging from 0.189 to 0.267), while time management also showed significant positive effects in all outcome measures (β ranging from 0.156 to 0.203).

The aptitude variables, while still statistically significant in some models, showed substantially weaker predictive power compared to discipline measures. A-level performance remained a significant predictor of GPA (β=0.142, $p<0.01$) and overall success (β=0.134, $p<0.01$), but failed to significantly predict employment rate or job performance when discipline variables were included in the model. Entrance examination scores showed even weaker predictive validity, with significant effects only for GPA (β=0.098, $p<0.05$) and overall success (β=0.095, $p<0.05$). The control variables revealed important contextual effects, with university type consistently favoring private institutions across all success measures (β ranging from 0.156 to 0.198), and socioeconomic status showing particularly strong effects on employment-related outcomes (β=0.234 for employment rate and β=0.189 for job performance). These findings conclusively demonstrated that while cognitive aptitude provided some predictive value, disciplinary characteristics were the dominant factors in determining graduate success, supporting the study's central hypothesis that traditional emphasis on aptitude measures creates a misleading "mirage" that obscures the true drivers of academic and professional achievement.

QUALITATIVE FINDINGS

Thematic Analysis Results

The qualitative analysis revealed four major themes that provided deeper insights into how discipline manifests and influences graduate success in Uganda's university context.

Theme 1: Adaptive Discipline in Resource-Constrained Environments

Participants from public universities consistently described developing what they termed "survival discipline" – a form of self-regulation that emerged from navigating resource limitations and institutional challenges. As one Makerere University graduate explained:

"You learn to be disciplined not by choice but by necessity. When the library is overcrowded, you create your own study schedule around availability. When strikes happen, you don't wait for classes to resume – you organize study groups and continue learning independently. This kind of discipline is different from following a set routine; it's about adapting and staying focused despite chaos."

Another participant from Kyambogo University noted:

"The unpredictability of our academic calendar forced us to develop internal discipline. Private university students might have consistent schedules, but we learned to create structure from disorder. This skill has been invaluable in my career because real workplaces are rarely as organized as we'd like them to be."

Theme 2: Structured vs. Self-Generated Discipline

Private university participants described benefiting from external structures that supported disciplinary development, but also recognized potential limitations. A Uganda Christian University graduate observed:

"The smaller classes and regular assessment schedules helped us maintain consistent study habits. However, I sometimes wonder if we became too dependent on external motivation. My friends from public universities seem better at self-motivation and working independently without supervision."

Conversely, public university students emphasized self-generated discipline as a core competency:

"We didn't have the luxury of hand-holding. You either developed self-discipline or you failed. I learned to set my own deadlines, create study schedules around library availability, and stay motivated even when everything seemed to work against us. These skills have made me more resilient in my professional life."

Theme 3: Persistence as Professional Currency

Both employer interviews and graduate testimonials highlighted persistence as the most valued disciplinary trait in Uganda's job market. An HR manager from a major Kampala firm stated:

"We can train technical skills, but we cannot teach persistence. Graduates who demonstrate the ability to persevere through challenges, especially those from public universities, often become our most valuable employees. They don't give up when projects become difficult or when resources are limited."

Theme 4: The Aptitude Illusion in Professional Settings

Employers consistently reported that academic credentials provided poor predictors of job performance, with discipline-related characteristics being more indicative of success. A bank manager noted:

"We've hired graduates with excellent grades who couldn't handle the pressure of meeting deadlines or working independently. Meanwhile, some of our best performers had average academic records but demonstrated exceptional discipline, persistence, and self-management skills during their probation period."

Discussion Of Findings

The findings of this study provide compelling evidence that discipline serves as the primary determinant of graduate success in Uganda's higher education system, effectively challenging the traditional "aptitude mirage" that has long dominated university admission and assessment practices. The quantitative results demonstrated that disciplinary measures consistently outperformed cognitive aptitude indicators in predicting graduate success across multiple outcome measures, with overall discipline scores showing correlation coefficients of 0.671 with comprehensive success indices compared to only 0.356 for A-level performance and 0.314 for entrance examination scores. This substantial difference in predictive validity suggests that Uganda's universities and employers should reconsider their emphasis on cognitive assessments in favor of evaluating and developing disciplinary competencies (Frey et

al., 2022). The multivariate regression analyses further reinforced these findings by showing that discipline variables accounted for the majority of explained variance in success outcomes (R^2 ranging from 0.489 to 0.703), while aptitude measures contributed relatively modest additional predictive power. The qualitative data provided crucial context for understanding these statistical relationships, revealing that discipline manifests differently across institutional environments but consistently serves as a bridge between academic learning and professional performance (Tellmann, 2022).

The institutional differences revealed between public and private universities illuminate important considerations for higher education policy and practice in Uganda. While private university students demonstrated higher levels in structured disciplinary components such as time management and study habits, public university students exhibited superior persistence – a characteristic that emerged as one of the strongest predictors of long-term success (Kohnke & Ting, 2021). This finding suggests that the challenging conditions often experienced in public universities, including resource constraints and institutional disruptions, may inadvertently foster resilience and adaptive capacity that prove valuable in professional settings. The qualitative interviews supported this interpretation, with public university graduates describing the development of "survival discipline" and self-regulation skills that enabled them to maintain focus and motivation despite external challenges (Davidesco & Milne, 2019). Conversely, private university students benefited from structured environments that supported the development of systematic study habits and time management skills, though some expressed concerns about potential over-dependence on external motivation. These institutional variations suggest that both university types contribute valuable but different disciplinary competencies to Uganda's graduate workforce, and that a comprehensive approach to higher education should recognize and leverage these complementary strengths (Kakooza et al., 2019).

The implications of these findings extend beyond individual student success to broader questions of educational quality, economic development, and human capital formation in Uganda. The persistent gaps between graduate qualifications and job performance reported by employers can be understood as symptoms of an educational system that has prioritized cognitive assessment over the development of self-regulatory capabilities essential for professional success. The COVID-19 pandemic experience, which revealed stark performance differences correlating more strongly with disciplinary habits than previous academic achievements, provided a natural experiment that validated the study's central hypothesis (Rodriguez & Welsh, 2022). The research findings suggest that Uganda's higher education system would benefit from systematic reforms that integrate disciplinary skill development into curricula, assessment practices, and institutional cultures. Such reforms could include the implementation of competency-based assessments that evaluate persistence, self-management, and adaptive capacity alongside cognitive achievements, the development of mentoring and coaching programs that explicitly target self-regulatory skill development, and the creation of institutional environments that challenge students to develop independence and resilience while providing appropriate support structures (Sitopu et al., 2021). By recognizing discipline as the "unyielding engine" of graduate success and moving beyond the aptitude mirage, Uganda's universities can better prepare graduates for the demands of a rapidly evolving economy while contributing to national development goals.

Conclusion

This comprehensive investigation into the relationship between discipline and graduate success in Uganda's public and private universities conclusively demonstrated that disciplinary characteristics serve as more powerful predictors of academic and professional outcomes than traditional aptitude measures. The study's mixed-methods approach, involving 1,200 survey participants and extensive qualitative interviews, revealed that overall discipline scores correlated with graduate success indices at 0.671, substantially exceeding the predictive power of A-level performance (0.356) and entrance examination scores (0.314). The multivariate analyses confirmed that discipline variables accounted for 49-70% of the variance in success outcomes, with persistence and time management emerging as particularly crucial components. Qualitative findings provided deeper insights into how discipline manifests differently across institutional contexts, with public universities fostering "adaptive discipline" and resilience through challenging conditions, while private institutions supported structured disciplinary habits through more stable learning environments. The research validated the concept of an "aptitude mirage" in Uganda's higher education system, where emphasis on cognitive assessments obscures the fundamental role of self-regulatory capabilities in determining long-term graduate success.

The study's findings have profound implications for educational policy and practice in Uganda, suggesting that the current focus on cognitive aptitude in university admissions and assessments may be producing graduates who are academically qualified but professionally underprepared. The evidence indicates that discipline serves as the critical mediating factor between intellectual potential and actual achievement, with students possessing moderate cognitive abilities but high disciplinary competencies often outperforming their more naturally gifted but less disciplined peers. The institutional differences between public and private universities revealed complementary strengths, with public institutions developing resilience and adaptive capacity while private universities fostered systematic study habits and structured self-management. These insights suggest that Uganda's higher education system would benefit from a fundamental reorientation toward recognizing, assessing, and developing disciplinary capabilities as core educational outcomes. The research provides a foundation for evidence-based reforms that could enhance graduate employability, improve institutional effectiveness, and contribute to national economic development by ensuring that university education develops the self-regulatory competencies essential for success in Uganda's evolving professional landscape.

Recommendations

Based on the study's conclusive evidence that discipline serves as the primary determinant of graduate success, Uganda's higher education institutions should implement comprehensive disciplinary competency frameworks that integrate self-regulatory skill

development into curricula, assessment practices, and institutional policies**.** Implementation should include the development of standardized discipline assessment tools, integration of self-regulatory skill development into course designs, and establishment of mentoring programs that explicitly target disciplinary competency building.

The Ministry of Education and Sports should revise university admission criteria to include validated discipline assessments alongside cognitive aptitude measures, creating a more balanced selection process that identifies candidates with the highest probability of academic and professional success**.** This recommendation addresses the study's central finding regarding the "aptitude mirage" and should be implemented through pilot programs in select institutions, development of discipline-focused admission tools, and training of admission personnel in competency-based evaluation techniques. The reformed admission system should maintain academic standards while giving appropriate weight to disciplinary characteristics that better predict long-term success.

Employers and professional organizations should collaborate with universities to develop workplace-relevant disciplinary competencies and establish graduate evaluation criteria that prioritize self-regulatory skills over purely academic credentials**.** This recommendation should be operationalized through the establishment of employer advisory committees that guide curriculum development, creation of internship and practicum programs that develop real-world disciplinary applications, and development of graduate competency standards that emphasize persistence, adaptability, and self-management. Such collaboration would ensure that Uganda's higher education system produces graduates equipped with the disciplinary foundations essential for contributing to national economic development and professional excellence.

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