

RESEARCH DIRECTIONS

Does Academic Led Motivation Help with Student Confidence, Attainment and Development of Life Skills?

^aGeorgiana Burca, ^aHarmeet Bath, ^aAli Meamar, ^aLena Becker, ^aAngela Fellingham, ^aTiffany Gama, ^aShenoy Rego, ^aEman Shakir, ^aKaren Whiting, ^aLizzie Wadsworth, ^aNadine Wehida, ^bSamar Gad, ^cSweta Ladwa ^a Simon Gould and ^aAhmed Elbediwy*.

- a. Department of Biomolecular Sciences, School of Life Sciences, Pharmacy & Chemistry, Faculty of Science, Engineering and Computing, Kingston University London, Penrhyn Road, Kingston upon Thames KT1 2EE.
- b. Department of Accounting and Finance, Kingston Business School, Kingston University London, Penrhyn Road, Kingston Hill Campus, KT2 7LB.
- c. Faculty of Engineering and Science, University of Greenwich (Medway Campus), Central Avenue, Chatham, Kent, ME4 4TB.

*Corresponding author: Ahmed Elbediwy: a.elbediwy@kingston.ac.uk

Keywords: *Academic Support; Attainment; Confidence; Engagement; Student Motivation*

Abstract

Motivation is a powerful tool. Students who are motivated tend to perform better than students with low self-esteem. Students who are encouraged to be more motivated by academics tend to develop self-determination and engagement (acting out of interest, curiosity, and abiding values) which is linked with academic well-being, persistence, and attainment. This research project uses an online questionnaire to try to understand further how we can utilise student's attitudes to motivate them and instil confidence. Preliminary findings from this project revealed that academic led motivation was critical for a student's course performance, with certain methods of teaching such as problem-based learning, and research informed teaching contributing to the student's enhanced confidence. Praise from an academic resulted in students working much harder. Findings from this project will allow us to suggest methods to enhance student confidence and ensure higher academic attainment in the process.

Introduction

Universities are constantly striving to unlock the full potential of students. We design inclusive curricula, refine our teaching methods to make learning more engaging, and invest in support systems all with the notion of making students attain better. Yet, one area that remains underexplored, and perhaps underappreciated, is the powerful relationship between student confidence and motivation and how this relates to attainment.

What we as academic do not always consider is that behind every statistic is a student with a unique story. A student may be battling self-doubt, juggling a multitude of responsibilities outside of university, or questioning whether they truly belong in higher education. In these moments, confidence becomes even more critical. And motivation? It is what keeps students going when difficulties arise in their

course. Both motivation and confidence are deeply personal experiences that shape how students approach learning.

Building student motivation is key to effective teaching and learning, yet it remains one of the most complex challenges educators faces. Motivation influences not only students' engagement with course material but also their persistence, performance, and overall academic success. To foster motivation, educators can employ strategies that connect learning to students' personal goals and interests, provide autonomy in decision-making, and create a supportive classroom climate that values effort and progress.

The role of academics in providing this motivation is critical. When lecturers and personal tutors actively support students, provide constructive feedback, and create inclusive learning environments.

It is essential, however, to understand that when students arrive at university, there tends to be differing mindsets. Understanding these allows educators to tailor their approaches to meet students where they are. For example, a career-focused student may respond well to real-world applications of course content, while an interest-driven student might thrive in exploratory and creative assignments (Hudig et al., 2020).

The psychological dimension of motivation also deserves attention. The Self-Determination Theory of motivation provides a beneficial framework for understanding how autonomy, competence, and relatedness contribute to intrinsic motivation. Students, when they feel they have control over their learning, are assured of their capabilities, and feel connected to their peers and lecturers, are more likely to engage deeply with their studies (Ryan and Deci 2000).

Another important notion is the creation of learning environments that are not only academically rigorous but also emotionally supportive. University student retention and success are closely linked to the quality of the academic and social experiences provided by the institution and the staff. Encouraging students to reflect on their goals, celebrate their progress, and connect with their peers can make a significant difference to their emotional and academic outcomes (Tinto 2015).

This project aims to explore student self-evaluated confidence and motivation in depth, examining what students face and how their experiences can enhance their confidence and motivation at Kingston University across different faculties and courses with the notion of suggesting some methods to enhance student confidence and motivation in higher education. By collecting both qualitative and quantitative data from students, we hope to try build a picture of how motivation is cultivated and sustained.

Method

Preparation of the project

All the student partners were selected after interviews from the School of Life Sciences, Pharmacy and Chemistry from the following courses: Biomedical science, Biochemistry and Biological Science courses (all levels). Seven students were selected. The students we recruited comprised two final year students from Biomedical Science and Biochemistry respectively, and five second year Biomedical Science students. Full ethical approval for the project was approved by the Kingston University CHERP (Centre for Higher Education Research & Practice).

Paper based Questionnaire

A paper-based questionnaire was prepared collectively between student and staff partners to address the question if academic led motivation helped with student confidence, attainment and the development of key life skills. The questionnaire was divided into three main sections: Section 1 primarily focused on key student demographics with questions included: Gender, age, ethnicity, course of study, level of study and entry qualifications. Section 2 was designed to understand student confidence, questions included: confidence in studies, rating current confidence, effect of praise by

academics, bad experiences in sixth form or college and university, effect of family pressures and if the course provided life skills. Section 3 focused on course belonging and motivation, questions focused on teaching techniques and confidence, confidence and course performance, and confidence an examination performance Most of the questions were multiple choice type questions except for seven free text questions.

Questionnaire dissemination

The questionnaire was disseminated by student partners who attended core lectures from each year group in the school of Life Sciences, Pharmacy and Chemistry, targeting all life science courses and in the Faculty of Business, targeting the Accounting and finance students. The number of potential students who could complete the questionnaire were as follows: Life science: L3 (Foundation year) ~100 students, L4 (year 1) ~350 students , L5 (year 2) ~250 students, L6 (year 3) ~250 students, L7 (MSc) ~100 students. Accounting and Finance: L4 (year 1) ~200 students, L5 (year 2) ~150 students, and L6 (year 3) ~150 students. Along with the questionnaire, a participant information sheet (PIS) and consent form were also provided. The PIS provided the information for the study. In line with our ethical approval, students could withdraw without prejudice at any point before completion of the study.

Presentation and analysis of data

The results extracted from the questionnaire were processed as previously described (Fellingham et al., 2024).

Results

Handing out questionnaires

The paper-based questionnaire was disseminated to levels 3-7 students (Foundation year – MSc level) within core Biomedical Science, Biological Science and Biochemistry modules and Accounting and Finance core modules. Of these, 202 were completed in full, all with signed consent forms.

Demographics breakdown

The course demographics for the questionnaire reported 46% of students as Biomedical Science students, 11% Biochemistry, 6% Biological science, 27% Accounting and Finance and 9% other. The ages of participants were primarily between the ages of 19-21 years of age. In terms of gender, the majority of participants were female at 67% (**Table 1**).

Table 1 Table of various key Demographics analysing course, age, gender and ethnicity of participants completing questionnaires, expressed as numbers and a percentage of total (%). Note: Some students did not respond to all questions.

Course					
BSc Biomedical Science	BSc Biochemistry	BSc Biological Sciences	BSc Accounting and Finance	Other	
93 (46.04%)	23 (11.39%)	13 (6.44%)	55 (27.23%)	18 (8.91%)	
Age			Gender		
18-21 Years	22-25 Years	26+ Years	Male	Female	Other
149 (73.76%)	38 (18.81%)	15 (7.43%)	61 (30.05%)	135 (66.50%)	7 (3.45%)
Ethnicity					
White	Black/Black British	Asian/Asian British	Mixed	Other	PNTS
44 (21.78%)	29 (14.36%)	93 (46.04%)	10 (4.95%)	23 (11.39%)	3 (1.49%)

The course level of participants tended to be mostly first year and second year (L4 and L5) students,

with 35% and 38% respectively, in terms of course entry, A-Levels (49%) were the most common forms of entry, (Table 2).

Table 2 Demographic table visualising participant's level of study and course entry qualification, expressed as numbers and a percentage of total (%). Note: Some students did not respond to all questions.

<i>Which level are you in?</i>				
L3	L4	L5	L6	L7
16 (8.47%)	66 (34.92%)	72 (38.10%)	35 (18.52%)	2 (0.01%)
<i>Entry Qualifications</i>				
A-Levels	BTEC	Foundation at Kingston University	Other	Mixed Entry
99 (49.01%)	40 (19.80%)	15 (7.43%)	16 (7.92%)	16 (7.92%)

Confidence based questions.

The first part of this project was focusing on the confidence of students in their current course. When asked if they feel confident in their studies, 78% of students reassuringly responded positively., When elaborating further, asked 'how they rate their current confidence, 77% of participants responded as having average confidence, with only 14% stating they felt very confident. The results of the next question were very interesting. When asked if praise from an academic, made them work harder, 86% said yes, suggesting that academic influence can result in high attainment. More concerning is the importance of student confidence in both performance on their course and examination performance as shown in Table 3.

Table 3 Response table analysing student confidence in their course and examinations, expressed as numbers and a percentage of total (%). Note: Some students did not respond to all questions.

<i>Do you feel confident in your studies?</i>		<i>How do you rate your current confidence?</i>			
Yes	No	Very Confident	Average Confidence	Not Confident at All	
154 (78.17%)	43 (21.83%)	28 (14.07%)	153 (76.88%)	18 (9.05%)	
<i>If you are praised by an academic, does this make you want to work harder?</i>		<i>Does confidence affect your course performance?</i>		<i>Does confidence affect your exam performance?</i>	
Yes	No	Yes	No	Yes	No
167 (86.08%)	27 (13.92%)	158 (84.49%)	29 (15.51%)	164 (88.65%)	21 (11.35%)

Responses to course belonging and motivation.

We next wanted to understand how students felt in terms of their motivation and experience at university. When asked if they had any bad experiences at university, 43% of participants said yes, with 59% stating it was because of an issue with an academic. Interestingly, 74% of students state that their course provides them with life skills, reassuring us that what we teach does provide students with the confidence to identify their strengths. When directly asking about confidence and motivation, it was decided to ask if a student's family atmosphere affected their confidence, to which 46% said yes. Finally, when trying to find out if certain teaching techniques and methods made students more confident, the vast majority said yes (71%), Table 4.

Table 4 Table of data analysing student belonging and motivation, expressed as numbers and a percentage of total (%). Note: Some students did not respond to all questions.

Have you had any bad experiences at university?		If yes, was this academic or something else?		Do you think your course provides you with life skills?	
Yes	No	Yes	No	Yes	No
82 (43.39%)	107 (56.61%)	57 (59.38%)	39 (40.62%)	140 (73.68%)	50 (26.32%)
Has family pressures/responsibility affected your confidence?		Are there certain academics and their teaching techniques which make you feel more motivated/confident?			
Yes	No	Yes		No	
90 (45.92%)	106 (54.08%)	136 (70.83%)		56 (29.17%)	

Qualitative data

Students who completed the questionnaire also had the option of free text questions, two of which uncovered some interesting comments:

- What factors can change your confidence?
- What ideas would enhance your course motivation/confidence? (**Table 5 and Table 6**)

For the question ‘what factors can change your confidence’, it was evident that such things as being supported, positive reinforcements, praise, constructive feedback and extra revision (Table 5). The question ‘What factors can change your confidence?’, responses include, smaller classes, different teaching techniques, stable timetable, more formative work and exploring career paths.

Table 5 Qualitative data responses to free text question ‘What factors can change your confidence?’

Open question	Most frequent comments
What factors can change your confidence?	‘Being supported’
	‘Positive reinforcement’
	‘Praise and help’
	‘Increased support during lectures’
	‘Constructive feedback’
	‘Extra revision’

Table 6 Qualitative data responses to free text question ‘What ideas would enhance your course motivation/confidence?’

Open question	Most frequent comments
What ideas would enhance your course motivation/confidence?	‘Smaller classes’
	‘Different teaching techniques’
	‘Give me more formative work to motivate me to study more’
	‘Looking at career paths’
	‘Less change to the timetable’

Discussion

Project Findings

The purposes of project were to explore how student confidence and motivation, influence a student's academic progression. The project also sought to understand the impact of teaching methodology and academic experiences on a student's confidence and motivation. Key findings revealed that whilst most students felt moderately confident in their studies, their confidence and motivation are significantly influenced by both academics, teaching methods, and personal circumstances such as family atmosphere. Furthermore, students expressed a strong preference for interactive and supportive learning environments, highlighting the need to reflect on institutional teaching style and structure in fostering academic success.

Reflection on Student Confidence

A key focus of this study was to investigate how confidence in students affected their academic journey and how confidence potentially translates into engagement and attainment. We found 78% of students reported feeling confident in their studies, although only 14% described themselves as "very confident." Most students (77%) rated their confidence as "average," suggesting room for improvement. Notably, 86% of students indicated that praise from academics motivates them to work harder, reinforcing the idea that positive reinforcement plays a critical role in student engagement and achievement. This aligns with the notion that illustrates the importance of academic encouragement in boosting student self-efficacy and performance (Nawa and, Yamagishi 2021).

Moreover, many students acknowledged that confidence directly affects both their course performance (85%) and examination outcomes (89%). These findings underscore the need for institutions to prioritize confidence-building strategies, such as enhanced and tailored constructive feedback, personalized support possibly by use of a mentoring system, and more recognition of student efforts (Nabi et al 2024).

Belonging, Motivation, and Teaching Methods

The project also investigated how students perceive their sense of belonging and motivation within their course. Alarming, 43% of students reported having negative experiences at university, with 59% attributing these to issues with academic staff. This highlights the critical role of academic-student relationships in shaping the university experience and ultimately student engagement and attainment. On a more positive note, 74% of students felt their course provided them with life skills, suggesting that curriculum design is effectively equipping students for future challenges. Kingston University has further enhanced a student's life skill into the curriculum with the future skills programme (<https://www.kingston.ac.uk/about/future-skills>).

Teaching methods were also found to significantly impact student confidence and subsequent engagement, with 71% of respondents stating that certain techniques made them feel more confident in their learning. Students also expressed a preference for smaller class sizes, a stable timetable (possibly due to work or family commitments), and more formative assessments. These preferences reflect a broader shift in higher education towards a flexible, and inclusive curriculum (Stentiford, & Koutsouris, 2022, Naidu, 2017).

Interestingly, 46% of students reported that their family atmosphere influenced their academic confidence, indicating that external factors beyond the university environment also play a role in shaping student outcomes (Mihai-Costea et al, 2023). This finding supports the need for holistic student support services that consider both academic and personal contexts.

Qualitative Insights and Student Voice

The qualitative responses received from participants provided a range of critical insights into the specific factors that influence student confidence and motivation. Students emphasized the importance of:

- Supportive academic relationships
- Positive reinforcement and praise
- Constructive feedback
- Interactive teaching methods
- Career-focused learning opportunities

Suggestions for enhancing motivation included incorporating more group work, using varied teaching techniques, and offering clearer career pathways. These responses echo the growing demand for active learning environments that prioritize engagement, collaboration, and real-world relevance as well as active learning (Freeman et al 2014).

Implementing the Project Findings for the University Sector

The findings from this project offer valuable guidance and insight for universities seeking to enhance student engagement and academic attainment. First, the link between confidence and performance suggests that institutions may benefit from investing in academic training for the provision of effective feedback and foster positive classroom environments. It is clearly observed that in most universities some students favour certain academics but never investigated why as this could be key to enhancing attainment. Praise, encouragement, and recognition should also be embedded into teaching practices to boost student morale and motivation.

Second, the preference for interactive and varied teaching methods calls for a discussion of traditional lecture formats. Didactic lectures tend not to work as effectively as they previously used to. Incorporating group work, formative assessments, and career-oriented content can help students feel more connected to their studies and future goals. Additionally, addressing structural issues such as class size, timetable stability, and academic support can further enhance the student experience. Also, the use of a flexible lecture style (Flectures) could enhance the student experience even further (www.timeshighereducation.com).

It is clear universities are beginning to recognize the diverse backgrounds and needs of their student populations. With a significant proportion of students from the global majority and non-traditional entry routes (e.g., BTEC), inclusive teaching practices and tailored support services are essential for ensuring equity and success across all demographics.

References

Bureau, J. S., Howard, J. L., Chong, J. X. Y. and Guay, F. (2021). Pathways to Student Motivation: A Meta-Analysis of Antecedents of Autonomous and Controlled Motivations, *Review of Educational Research*, 92(1), 46–72.
<https://doi.org/10.3102/00346543211042426>

Fellingham, A., Shuwara, T. H., Saint Amand, T., Gunawan, F., Gould, S. and Elbediwy, A. (2024). Investigating the transitional barriers university students face when moving from further education; what are the potential issues they may meet? *New Directions in the Teaching of Natural Sciences*, (19).
<https://doi.org/10.29311/ndtns.vi19.4670>

Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., and Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics, *Proceedings of the National Academy of Sciences*, 111(23), 8410–8415.
<https://doi.org/10.1073/pnas.1319030111>

Naidu, S. (2017). How flexible is flexible learning, who is to decide and what are its implications? *Distance Education*, 38(3), 269–272.
<https://doi.org/10.1080/01587919.2017.1371831>

Hudig, J., Scheepers, A. W. A., Schippers, M. C., and Smeets, G. (2020). Motivational Mindsets and Reasons for Studying: Development and Validation of a Classification Tool, *Frontiers in Psychology*, 11, 535801.

<https://doi.org/10.3389/fpsyg.2020.535801>

Kingston University. (n.d.). Future Skills. <https://www.kingston.ac.uk/about/future-skills>.

Mihai-Costea, A., Hersi, N., Abu, L., Gunawan, F., Coakley, E., Gould, S., and Elbediwy, A. (2023). Investigating barriers that prevent students attaining their full potential during their degree, *New Directions in the Teaching of Natural Sciences*, 18(1).

<https://doi.org/10.29311/ndtns.v18i1.4120>

Nabi, G., Walmsley, A., Mir, M., and Osman, S. (2024). The impact of mentoring in higher education on student career development: a systematic review and research agenda, *Studies in Higher Education*, 50(4), 739–755.

<https://doi.org/10.1080/03075079.2024.2354894>

Pedler, M. L., Willis, R., and Nieuwoudt, J. E. (2021). A sense of belonging at university: student retention, motivation and enjoyment, *Journal of Further and Higher Education*, 46(3), 397–408.

<https://doi.org/10.1080/0309877X.2021.1955844>

Ryan, R. M., and Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being, *American Psychologist*, 55(1), 68–78.

<https://doi.org/10.1037/0003-066X.55.1.68>

Stentiford, L., and Koutsouris, G. (2022). Critically considering the 'inclusive curriculum' in higher education, *British Journal of Sociology of Education*, 43(8), 1250–1272.

<https://doi.org/10.1080/01425692.2022.2122937>

Tinto, V. (2015). Through the Eyes of Students, *Journal of College Student Retention: Research, Theory & Practice*, 19(3), 254–269.

<https://doi.org/10.1177/1521025115621917> (Original work published 2017)

Times Higher Education. (n.d.). Ever wished lectures could be more flexible? Introducing the flecture.

<https://www.timeshighereducation.com/campus/ever-wished-lectures-could-be-more-flexible-introducing-flecture>