Exploring Collaboration and Individual Research Experience among Ghanaian Academics: A Qualitative Research

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

Original Research Article

ABSTRACT

Background: This study seeks to understand collaborative and individual research among academics in higher education institutions (HEIs) in Ghana, what that means to them, and the challenges they face. Internal and external research collaboration is seen as the driving force behind teaching and learning in HEIs. In Ghana, both collaborative and individual research comes with power dynamics among academics, yet they also present unique opportunities to enhance their well-being and professional careers.
Methods: This study employed a qualitative research approach to gather the experiences, views, and stories of 10 academics from Ghanaian HEIs. The data were analysed using an interpretative phenomenology approach (IPA). This method focused on understanding the lived experiences of the academics to interpret their stories and experiences regarding their involvement in collaborative and individual research, as well as the meanings and challenges.
Results: The results positioned individual research ahead of collaborative research. Monetary rewards were the primary motivation for collaborative research regarding grant applications. In

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contrast, for most academics in Ghana's HEIs, collaboration for research publications was driven by the quest for promotion, recognition, self-actualisation, and respect among colleagues.

Conclusion: This study is the first to explore the impacts of collaborative and individual research among Ghanaian academics in HEIs. The results suggest that individual and collaborative research exists among Ghanaian academics in HEIs. However, individual research is driven by monetary gain. In contrast, collaborative research is driven by publications and citation rates, the pursuit of promotion, recognition, self-actualisation, and respect among most academics in Ghana's HEIs. The study highlights the importance of individual and collaborative research in the context of Ghanaian academic workplace well-being. The study recommends a mindset change regarding collaborative research among academics in HEIs in Ghana. This way, the most experienced and elite researchers could share and guide early researchers to bridge the research knowledge gap. Also, leadership roles could be established to ensure effective research collaboration through mentorship and training programs that align with academic career growth. This initiative could foster relationship-building and increase collaboration to reduce the monetary-driven and individualistic mindset.

1. INTRODUCTION

The word collaboration can mean different things to different people and their work, such as partnership, cooperation, alliance, teamwork, group work, etc., making its usage and expression difficult and confusing. In this study, research collaboration means two or more academics working together on a research project in higher education institutions (HEIs) or universities. Previous studies [1,2,3] have shown that research collaboration among scholars and their colleagues and between academic and non-academic institutions has become the norm in technical and scientific research fields [3]. This is because both the individual and the institution benefit from the research collaboration financially as well as in terms of recognition and knowledge generation. In HEIs, including universities, research work is paramount to academics. It catalyses their promotion, status, and recognition in their discipline and significantly contributes to the institution's rankings, reputation, accreditation, and competitiveness. This, in turn, aids in attracting exceptional talent in terms of staff and students. However, the profession's demands (teaching load, marking, research supervision, administrative duties, and other responsibilities), work pressures, and the scarcity of research skills, such as finding suitable research partners, render research collaboration in a higher education environment challenging – although the challenges are surmountable. These hurdles, while significant, highlight the opportunity for innovative solutions to enhance research collaboration and workplace well-being and underscore the pressing need for practical solutions. In light of the above, this study seeks to determine the understanding of collaborative and individual research work among academics in HEIs, what that means to them, and their challenges.

2. LITERATURE REVIEW

2.1 Understanding and Meaning of Collaborative Research in Higher Education

Academic involvement in collaborative research work or projects in HEIs is not new. However, its benefits have received much less attention than other forms of collaboration, as well as what it means to academics and how it impacts their well-being [4,5]. This form of cooperation is long established and offers both merits and demerits for the parties involved, either within their institution or externally with other institutions [6]. Studies have shown that research collaboration among academics and their colleagues, as well as between academic and non-academic institutions, has become the norm in both the technical and scientific research fields [1,2,3]. This is due to the benefits individuals and institutions receive regarding knowledge generation, recognition, productivity, and financial rewards in research collaboration [7,8,9]. However, in the past, such collaboration only existed on an ad hoc basis to resolve specific problems in the Western academic community [10]. The reason has been that some academics and researchers saw research collaboration as dull, over-financed, over-organised, and unattractive. In contrast, individual research has connotations of

dedication, true intellectual work, creativity, inspiration, and a non-bureaucratic nature. This cliché tells us that collaborative research is bad and individual research is good [10,11], and as Jeong et al. [12] highlight, most academics only engage in collaborative research for better funding access and recognition. However, some challenges limit the success of most collaborative research, especially in HEIs in developing countries [13].

- **Individual research in higher education institutions**

Conducting individual research is not new in HEIs, and most academics do it. However, the decision to work individually, what drives it, and what this means to academic well-being is ultimately personal and is part of the concept of bottom-up 'self-organisation' [14]. Increasingly, the inspiration to conduct individual research comes from the academics themselves. The study by Wilsdon et al. [15] found that researchers, especially European scientists, tend to collaborate instead of work individually because they seek 'brilliance', resources, and a 'reputation' and are willing to work with the most outstanding colleagues in their discipline. This view is supported by Wagner and Leydesdorff's [16] study titled "Network Structure, Self-Organization, and the Growth of International Collaboration in Science."

Another study by King [17], titled **"Power and Networks in Worldwide Knowledge Coordination among Academic Researchers and Scientists"**, also noted that educational research is mainly driven by curiosity and reflects researchers' ambitions for recognition and reputation, whereas curiosity is driven by the individual quest to succeed. Early researchers in HEIs vary in their decisions and predictions regarding whether to collaborate or work individually. However, in competing for recognition, the most experienced researchers or elite in academics tend to collaborate because research collaboration and international progress have become metrics of excellence and quality (p.12) [18]. In the context of Ghanaian HEIs, individual research productivity is strongly linked to monetary gain. Ghanaian higher education research is characterised by a double parallel process: "monetary accumulation advantage" and "internationalisation grant accumulation advantage" (p.10) [19]. Monetary accumulation

tends to imply a higher individualistic approach to conducting research, while international grant accumulation implies satisfactory higher publication and citation rates and increasingly stratifying roles. These strata put collaboration with colleagues at the base and individual research focusing on monetary gain at the top. Therefore, individual research is ingrained in personal values and monetary gain rather than research collaboration with colleagues in their institution's disciplines [20,14].

3. METHODOLOGY

3.1 Study Design and Sampling

This study adopted a qualitative approach to capture the experiences and views of academics from selected HEIs in Ghana. These institutions had a student population of 47,505 and an academic staff of 1,500. All the academics in this study were full-time employees, with positions and responsibilities ranging from lecturers to senior lecturers, readers to heads of departments and across several faculties. The study used non-probability sampling (snowballing) to identify the participants, whereby 27 participants were invited, and 10 agreed to be interviewed and participate in the study.

3.2 Demography of Participants

10 academics agreed to participate and shared their experience and views on research collaboration. The participants were 10 (6 females and 4 males) academics who had participated in different research collaborations and held various roles in their institutions. They had worked in multiple roles for five years and above with massive research output, crucial to their promotion and professional reputation. The participants' educational backgrounds varied across disciplines, each with the highest PhD qualification. Their age also ranged between 35 to 55 years, with the youngest being a female and the oldest a male.

3.3 Data Collection Method

In-depth interviews were conducted to explore the views and experiences of collaborative research among academics and its associated challenges. Given the context of the study and its focus on collaborative research, attention was

Table 1. Participants Demographic Data

Pseudonyms	Qualification	Age	Gender	Faculty	Position	Years of Service
Tina	PhD Science	52	Female	Health Sciences	Senior Lecturer	10
Sandra	PhD Sociology	38	Female	Education	Lecturer	5
Alex	PhD Biomedical	50	Male	Medicine	Senior Lecturer	12
Lily	PhD Finance	39	Female	Business School	Lecturer	8
James	PhD Science	46	Male	Health Sciences	Lecturer	12
Lydia	PhD Chemistry	48	Female	Engineering	Lecturer	12
Jack	PhD Medicine	58	Male	Health Sciences	Prof. Head of Department	15
Peter	PhD Biomedical	45	Male	Education	Lecturer	8
Susan	PhD Science	40	Female	Health Sciences	Lecturer	7
Emy	PhD Social Policy	45	Female	Gender Studies	Lecturer	6

paid to the participants' roles at their various HEIs (research pathways, knowledge exchange, their involvement in grants applications, leading and supervising research work at a higher level aside from teaching). The interview mainly focused on exploring the participants' accounts of what research collaboration meant to them, whether they had been involved in or worked alone, and the challenges. Face-to-face interviews were conducted around specific questions using a semi-structured interview guide.

The participants communicated at their own pace and decided on the extent of the information they were comfortable providing to shape their experiences and stories. The participants reflected on their experience in all the research collaborations they had participated in, which helped to construct the interpretation of the meaning of collaborative research and its challenges and how it impacted their well-being and professional reputation. The data quality depended on the participant's willingness to share their experiences and reflect on significant occurrences and challenges to shape their stories. In this case, the participants' time, flexibility, and willingness were reflected in the duration of the interview, with some interviews lasting longer than others, between thirty minutes and an hour. The interviews were audio-recorded, transcribed, and coded for analysis.

3.4 Qualitative Data Analysis

- **Interpretative Phenomenological Approach (IPA)**

IPA was used for the data analysis. Phenomenology is a philosophical approach and science of the first-person viewpoint, emphasising individuals' lived experiences [21,22]. IPA involves an in-depth examination of an individual's experience of a specific phenomenon, what that means to them, the challenges, and how they make sense of it. The data analysis and interpretation steps by Smith et al. [23] covered the participants' claims, meanings, and concerns through phase-by-phase analysis. The IPA approach involves the identification of commonalities and emergent themes and emphasises divergence from individual transcripts [21,23]. The six steps of IPA are reading and transcription, initially noting the emerging themes, developing emergent themes, searching for connections across emergent themes, moving to the next case, and looking for patterns across cases. This helped to produce a circular interpretation instead of a linear interpretation, as well as dynamic thinking, which led to an inductive approach moving from specific to communal and interpretive [24]. The participants' experiences and stories are presented in precise quotations with pseudonyms for confidentiality.

3.5 Data Validity and Reliability

The primary consideration of conducting a qualitative study is to ensure trustworthiness and authenticity. Polkinghorne [25] indicates that in collecting evidence of the participants' stories and issues, the focus is not on ascertaining whether some of the issues truly happened but rather on the meaning experienced by the participants [Polkinghorne 2007:479]. Consequently, I did not intend to confirm the facts. Instead, I sought to explore the views and experiences of the lecturers, how they see research collaboration and how that impacts their promotion and academic reputation among their colleagues and well-being. This position is supported by Riessman [25], who stated that the "verification of fact" is less salient than understanding the changing meaning of events for the individual involved. Riessman went on to explain how these changing events, in turn, are located in culture and history, creating a compelling, dominant relationship with the participants [26]. To understand the context of the participants' work, I spent time with them, visiting their lecture halls, laboratories, and offices before the interviews. This was done to build a rapport and ensure the credibility and trustworthiness of the study.

4. RESULTS AND ANALYSIS

- **Demographic Characteristics of the Respondents**

This study's participants were selected from three HEIs in Ghana. The participants had worked for five years or more, with ranks varying from lecturer to senior lecturer, readers, professors and heads of departments. The participants were males and females between 35 and 50 years old, with different academic backgrounds and working across different faculties. They had research interests and had participated in various collaborative research projects in their institutions locally and externally with agencies from abroad on grant applications, grant reviews, project evaluations, and project supervision.

The Table 1 shows that sites 1 and 2 (HEIs) produced the most sampled participants (9 & 7), with sites 1 and 3 having the highest number of participants who agreed to participate (3 participants each). The participants were happy to contact their colleagues at other institutions to encourage them to also participate. This shows the importance of using the snowball approach, as one key participant could reach out to other participants within their institutions with similar research collaboration experiences as their career pathway and interest, thus reducing the time and effort spent recruiting participants.

4.1 Academics' Accounts of Collaborative and Individual Research in Higher Education in Ghana

The participants expressed their views on research collaboration within and outside their institution and how it affected their well-being and professional outlook. For example, a female senior lecturer, Tina, explained that collaboration research in academia always comes with problems.

> *"Some colleagues will not commit to the work but want to enjoy the success. They complain about the teaching load and administrative duties. Others also complain about individual behaviour and attitude towards work. If you agree to work on a project, you must commit and play your part"* (Tina, senior lecturer, 10 years).

Table 2. Respondents' participation rate

Means of Recruitment	Total Number Sampled	Agreed to Participate	Rate of Participation
Site 1	9	3	33%
Site 2	7	2	28%
Site 3	6	3	50%
Referrals	5	2	40%
Total	27	10	37%

Source: Field Data

Susan, a lecturer, said:

> "Some colleagues are rude to others and will not talk to you because they disagree with your ideas or suggestions in a meeting. This makes collaborative research in our institution challenging" (Susan, lecturer, 7 years).

Another female lecturer and a significant researcher explained:

> "Research collaboration is essential to me because, if nothing at all, I will get the required papers to publish and get my promotion. Also, my colleagues will congratulate, respect, and make me feel good. My motivation in research collaboration is to publish and nothing else" (Sandra).

The researcher asked, "Do you conduct individual research as well?" and Sandra continued:

> "I do, but it takes time. Sometimes, there is no self-motivation due to other commitments in the faculty. However, with collaborative research, I don't want to let my colleagues down; I try to fit all in [laugh, laugh]".

Alex, another senior lecturer, also said:

> "Individual research is good, but collaboration helps to speed things up. For example, you will get more ideas and learn from colleagues, especially if you can reach out to others from different faculties. Collaboration is best for research grant applications" (Alex, senior lecturer for 12 years).

Lily, a lecturer for 8 years, supported what Alex said:

> "I only collaborate when it comes to applying for research grants. With a grant application, you need more expertise; you can learn from others. The success of grant applications is huge; it brings positive self-esteem. I have collaborated with colleagues to publish journal articles, but I prefer working alone. It's just a personal choice, laughs, laughs" (Lily).

Another participant, James, supported Tina:

> "In research meetings, colleagues shout and scream at each other because they disagree with the philosophical position or an approach, and they will leave. Simple as it may sound, they continue to argue, drawing the team back. I disagreed with a senior colleague in a research meeting; he got angry, and for years, he refused to talk to me. This makes collaboration work difficult and stressful, negatively affecting your well-being" (James, lecturer for 12 years).

Emy, a lecturer, also explained:

> "Women are more flexible about collaboration because promotion and respect in competing with male colleagues are the end goals, not money" (Emy, lecturer for 6 years).

Tina and James's experience is a reminder to academics conducting collaborative research that human factors such as attitude, behaviour, and beliefs are bound to affect our work and well-being negatively. Hence, those involved must be prepared to focus on the task and the reasons for collaboration and not be discouraged by such human factors.

James again shared specific examples of challenges associated with collaborative research:

> "Hmm, the problem is, there is always a disagreement with money among us when we collaborate. Everybody wants a bigger share of the money. This can sometimes create work tension, but individuals will benefit independently" (James).

Researcher: What do you mean by individuals will benefit independently?

> "Hmm, at the end of the day, we all want money. If I write for grants, get X amount of money, and manage to use X% to do the research, the rest is for me. But when you collaborate, you have to share the remaining money with the person after paying X% to the institution, and you may end up with nothing" (James).

Researcher: What happens if an individual fails to get any grant?

James: *"Then you use your head" Ha-ha [laughs].*

Researcher: What do you mean by using "your head"?

James: *"Then you join a grants team. If you join a team, the initiator and the big men will take a more significant portion of the money. I don't care how much I get when I join a team with grants; all I want is to progress. But some individuals will not agree, which is the confusion among us here"* (James).

Lydia, a lecturer, explained as follows:

"There are internet connectivity issues, unstable power, lack of quiet spaces for lecturers, and poor online library/databases, making research work difficult. For example, see how crowded the office is, with others on their phones, and how anyone can conduct any meaningful research meeting" (Lydia, lecturer for 12 years).

Peter shared his story as follows:

"As an individual, you will waste time, and if you apply for grants alone and win, your colleagues will praise you but also tag you as selfish and not a team player. Publication and grants will bring promotion and status among your colleagues and increase self-esteem" (Peter, lecturer for 8 years).

Another male participant, Jack, explained:

"There is a wealth of human capital but no effective coordination. We need teamwork, but most people don't want to work together. The resources might not be enough, but I don't think that is the key issue. The problem is that the desire to work together is non-existent, and people are not taking responsibility (Jack).

Jack continued:

If we don't train this generation to take the initiative, even if we have all the resources in the world, we will not be able to work effectively to improve our research capacity. This lack of effective coordination is a pressing issue that needs to be addressed urgently. Training the current generation to take the initiative is a crucial step in this direction" (Jack, a professor and a head of the department, 15 years).

James' earlier story suggests that some participants know they can write and publish the required papers for their promotion on time through research collaboration [11]. However, due to their desire for more money and the misunderstandings that frequently arise whenever the money from research collaboration is shared among colleagues, some prefer to work alone to avoid making enemies at the workplace. James cares little about the financial aspect of research collaboration; instead, he is concerned about his career progress, mainly promotion.

As he puts it, "I do not care how much I get when I join a team; all I want is to progress". Peter thinks that progress at work (promotion) will bring him respect and status among his colleagues and increase his self-esteem. James's story demonstrates how the desire for money and recognition among some academics within higher education have exceeded the benefits of research collaboration between academic colleagues [15]. This situation also affects those with good reasons to collaborate in research for their career development and progress at work, which aligns with the findings by Bozeman et al. [3]. The result is that those less experienced in writing grant proposals never get to learn from their senior colleagues, who play a crucial role in mentoring and knowledge transfer. Jack also supported James's story and said that the lack of research collaboration significantly hampers research growth in Ghanaian HEIs, which needs to be addressed. The implications for their workplace well-being are profound and will be discussed below.

5. DISCUSSION

5.1 The Impact of Collaborative Research on Academics' Well-being in Higher Education

The stories and experiences of academics in this study underscore the potential of research collaboration to impact workplace well-being positively. It is a tool that can facilitate accessible publication, enable grant acquisition, and earn respect among colleagues upon successful outcomes, all contributing to career advancement. However, pursuing larger shares of research-generated income can lead to discord, disrespect, and individualism, detracting from the positive aspects of workplace well-being. Despite these challenges, the positive impact of research collaboration on workplace

well-being is significant and reassuring and should not be overlooked.

The participants indicated that these behaviours affect research growth in their various faculties, and that their leaders know, although not much has been done to resolve this. They were also concerned about the individuality mindset displayed by their colleagues in the various faculties, which goes against the research culture their institutions advocate for. It is crucial to address this issue and foster a more collaborative mindset, which is a necessary and achievable change. This shift in mindset can help address the challenges and promote a positive research culture. Another concern that negatively affected the participants was their attitude towards colleagues in collaborative research meetings (shouting, insults, and persistent disagreements). The experiences and stories presented by the participants show that academics are aware of the negative sentiments that come with collaborative research among academics in HEIs in Ghana. This makes them uncomfortable, and to avoid offending their colleagues, they decide to work individually.

- **The positive impact of collaborative research on academic well-being**

Despite the limitations and challenges of collaborative research revealed in this study, the participants (academics) also expressed a profound sense of fulfilment in their work. This was evident in their stories of meeting key performance indicators (KPIs), achieving promotions, publishing articles, gaining recognition among their colleagues, and receiving monetary rewards, as demonstrated by the experiences of Alex, Sandra, and Lily. These positive outcomes reassure us of the value and potential of collaborative research in enhancing academic well-being in HEIs [6,27]. Alex said, "Individual research is good, but collaboration

helps to speed things up. You get more ideas and learn from colleagues, especially if you can reach out to others from different faculties". Sandra said, "Research collaboration is essential to me because, if nothing at all, I will get the required papers to publish, which will help my promotion".

Lily said, "I only collaborate when applying for research grants because you need more expertise; you can learn from colleagues. The success of grant applications is enormous; it brings positive self-esteem". The possible explanation for these participants' stories is that, though they experience challenges during research collaboration, they also see the positive sides and are happy to collaborate due to its benefits. These experiences align with the work of Salimzadeh et al. [28]. The main factors impacting academics' positive psychological workplace well-being and self-actualisation are shown Fig. 1.

- **The negative impact of collaborative research on academics' well-being**

The participants were worried about their institutions' unavailability and limited resources (poor internet connectivity, lack of resourceful online databases, lack of quiet rooms and an unstable power supply), which hinder individual and collaborative research work. They said this causes delays in their promotions because part of their KPIs for promotion is research publication, which cannot be met without collaboration. What they were most concerned about was the unconcerned attitude of their leaders in addressing these issues. This affected their motivation and put them under pressure during promotions. Their concern is ingrained in the fact that they are likely to fail their promotional interviews without the required number of publications to support their work.
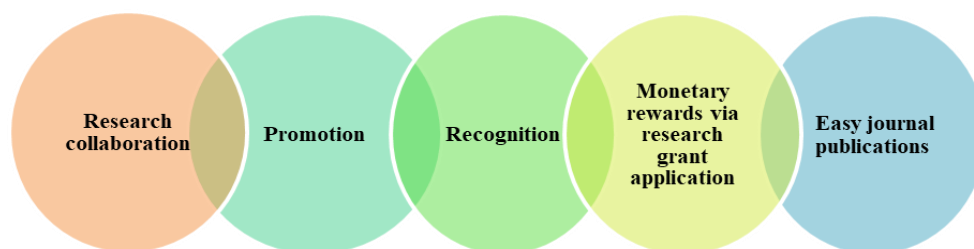

Fig. 1. The positive impact of collaborative research on academic employees in Ghana
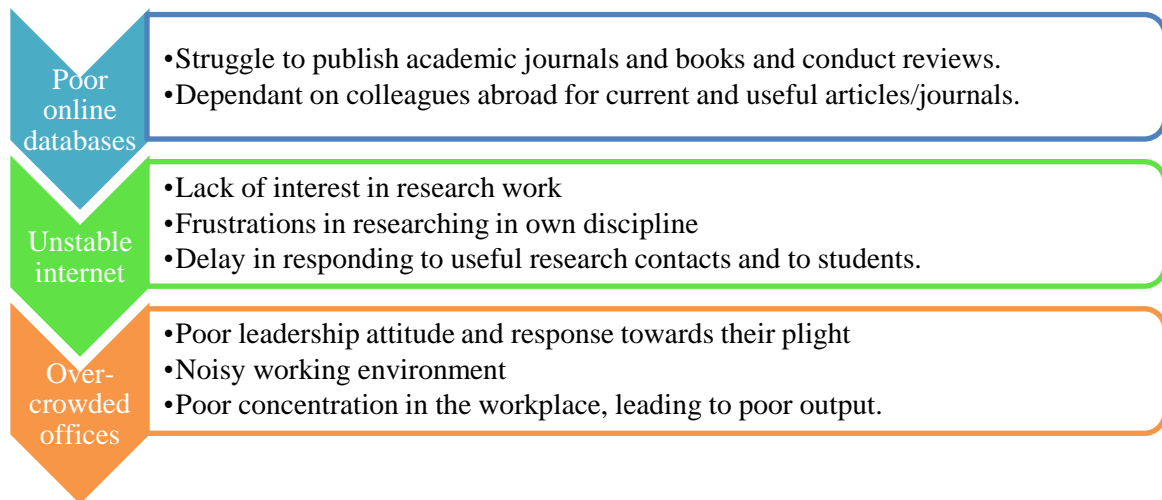*Source: Designed by the Author based on the participants' stories*

Poor online databases	•Struggle to publish academic journals and books and conduct reviews. •Dependant on colleagues abroad for current and useful articles/journals.
Unstable internet	•Lack of interest in research work •Frustrations in researching in own discipline •Delay in responding to useful research contacts and to students.
Over-crowded offices	•Poor leadership attitude and response towards their plight •Noisy working environment •Poor concentration in the workplace, leading to poor output.

Fig. 2. The negative impacts of collaborative research on academic employees in Ghana
Source: Designed by the Author based on the participant's stories.

The participants see their leaders as not sensitive to their plight and career growth. These actions affect their workplace well-being negatively, as shown by the experience of Lydia, Tina, and James. An explanation is the leadership disconnections and disengagement with their subordinates and lecturers, who are the core of the HEI sector in Ghana. In this context, the leadership sees the lecturers' issues as unimportant because prompt actions are not taken to aid their promotion, which will, in turn, affect their psychological workplace well-being, self-actualisation, and status among their colleagues and in the broader society. This view is correlated to Schaufeli's work [29] "on engaging leadership and how to promote work engagement". Another plausible explanation is financial constraints. Like any public institution in Ghana, the HEI is underfunded and filled with bureaucracy, hierarchies, and structural issues that impede prompt action plans to address internal resource shortages. This makes it difficult for leaders to undertake projects quickly [30,31].

However, some leaders of public HEIs in Ghana rely on internally generated funds, such as admitting private students who pay high tuition fees, increasing student enrolment numbers and other projects, to augment their finances. Although laudable, this action has negative consequences, such as a growing lecturer workload (teaching, marking, seminars and research supervision), causing work-related stress. When academics (lecturers and researchers) become overwhelmed by inadequate resources to engage in collaborative and individual research, it puts pressure on them, delays their promotion, and demotivates them. This can lead to all forms of anxiety, as expressed by the participants. Again, there is a chance of them looking for opportunities elsewhere, which this study has hinted at and which aligns with parts of the findings of Cidlinská and Zilincikova [32].

5.2 Collaborative Versus Individual Research in Ghanaian Higher Education

The experiences, views, and stories shared by the participants in this study on research collaboration revealed differences in their responses to what has happened in the past and what is happening now in HEIs [33]. Most of this study's participants, both lecturers and senior lecturers, and especially the female participants, felt that research collaboration among colleagues is good because it helps them to swiftly organise the required research papers they need for their promotion, a conclusion similar to the findings of Bozeman et al. [3] on good and bad research collaboration. Their views here point to their eudaimonic understanding of well-being (i.e. the concept of flourishing) in their career. The participants who were particularly enthused about research collaboration in this study were senior lecturers and the heads of the departments. Again, female academics were more interested and flexible in collaboration than their male counterparts, a view similar to the findings of the study of Kwiek and Roszka [34] in their study titled "Gender Disparity in Research Collaboration". The participants believed that

collaboration can boost the research capacity of their faculties and the institution. For example, Jack said, "What we need is teamwork; with that, we can increase our research capacity" (Jack). Sandra said, "Research collaboration is essential to me because, if nothing at all, I will get the required papers to publish and get my promotion."

However, most participants (lecturers) felt that research collaboration with their colleagues in the same institution had experienced some setbacks, as exemplified by James, Susan, Emy, Lily and Tina's experiences. This assertion is similar to the findings of a quantitative study conducted by Youtie and Bozeman [35] on researchers working at different Carnegie universities in the USA. This study concluded that problems occur in most collaborative research, mainly when both academics are at the same institution. While this was a common concern for the participants who were lecturers, only Tina and James could voice their reservations about the problems involved in collaborating with colleagues to conduct research. This supports the sociocultural influence Jack pointed out earlier: Ghana employees generally do not complain about issues at work. A possible explanation is the strong cultural belief that prevents people from speaking about the challenges of research collaboration. Indeed, this study has revealed from the participants' stories and is aligned with Ofori and Antwi's [36] work, which found that a mindset change is needed among some Ghanaian academics to speak up about the challenges confronting their work in Ghanaian universities for a positive workplace well-being experience.

Lam [37] studied what motivates academics to collaborate in research based on online questionnaires and individual interviews involving 735 research scientists from five UK universities. The author found that most research scientists collaborate to improve their academic reputation, financial rewards and intrinsic reasons. However, the monetary reward played a moderately small part in their motivation to collaborate in research. Lam's study was supported by a recent survey by Kelly et al. [4] on team research in higher education and a more recent study by Bidandi et al. [5] on collaboration and partnership research between South African HEIs and stakeholders.

In contrast, most participants in this study were more interested in individual research because of its financial rewards (the ability to control and keep all the money). For example, James said, "At the end of the day, it is about the money; we all want money. So why work with someone and share that money" (James, lecturer). It appears that the participants in this study were more interested in the financial rewards of conducting individual research than in the other benefits stated earlier in Lams' [37] study. However, the minority of this study's participants (lecturers) believed that research collaboration would help them organise the necessary research papers for their promotion and boost their status among their colleagues.

For example, Sandra said, "Research collaboration is essential to me because, if nothing at all, I will get the required papers to publish, which will help my promotion". Alex also said, "Like me, I don't care how much I get when I join a team because I want to progress in my career." This study's participants' views align with those documented in policy futures in the education literature, including those from the studies by Lam [37], Kelly et al. [4], and Bidandi et al. [5]. Further, based on this study's participants' experience and views, there appear to be power dynamics between the heads of the department and lecturers when it comes to sharing the monetary rewards achieved through research collaboration. For example, James said, "If you join a team with big ideas, you will do all the work, but the 'big man' and the initiator will take a bigger portion of the money; that is the problem." This has made research collaboration less attractive to the lecturers in HEIs in Ghana.

Again, the study by Bozeman et al. [3], using semi-structured interviews to explore the causes of bad and good academic research collaborations, found that "bad research collaboration" was characterised by power differences, inadequate communication, and problematic personalities. On the other hand, good research collaboration was connected to good work habits, complementary skills, trust, and the fact that researchers enjoyed each other's professional company. Relating the findings of Bozeman et al.'s study to the views presented by this study's participants shows that what constitutes bad research collaboration among academics in HEIs in Ghana is the issue of "sharing the money" from research collaboration (research grant collaboration) among colleagues, particularly lecturers.

This may suggest that some academics in Ghana prefer to work individually unless a substantial financial reward is involved in research collaboration. On the other hand, when individuals fail to secure research grants to work individually, they tend to join a team with the hope that, at least this way, they will get the needed research papers for their promotion. These "double standards" displayed by some participants regarding research collaboration undermine their commitment to research collaboration and their readiness to contribute to the research work, of which most academics are proud.

6. CONCLUSION AND RECOMMENDA-TIONS

This study explored the impact of collaborative and individual research among Ghanaian academics in HEIs. The results suggest that individual and collaborative research exists among Ghanaian academics. However, individual research is driven by monetary gain, while collaborative research is driven by publications and citation rates, the pursuit of promotion, recognition, self-actualisation, and respect among most academics in Ghana's HEIs. The study highlights the importance of individual and collaborative research in the context of Ghanaian academic workplace well-being. The study recommends a mindset change regarding collaborative research among academics in HEIs in Ghana. This way, the most experienced and elite researchers can share and guide early researchers to bridge the research knowledge gap. Also, leadership roles in ensuring effective research collaboration exist through mentorship and training that aligns with academic career growth. This initiative could foster relationship-building and increase collaboration to reduce the monetary-driven and individualistic mindset.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

CONSENT

As per international standards or university standards, Participants' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Author has declared that no competing interests exist.

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