ORIGINAL SCIENTIFIC PAPER

Understanding Gender Approach to Educational Achievement: Perceptions of Outstanding Female Students of University in Aceh, Indonesia

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A B S T R A C T

There is a known gender gap in higher education where female students have different learning outcomes at school and university levels. This review article begins by examining scientific facts supported by evidence from field studies and understanding the various factors in determining differences in learning outcomes of gender approaches in achieving higher education outcomes. For this reason, this study explores the perspective of a gender model approach to educational achievement in terms of the thoughts of outstanding students in several universities in Aceh Province through data analysis of the phenomenological approach to the interview data of 400 exceptional participants to hear their perceptions about their learning progress. With this semi-structured interview, we understand that differences in educational outcomes are related to gender differences in non-cognitive traits of education, such as behavior, interests, motivation, personalization, consistency, and external support; However, causal interpretation of the interview evidence and literature review has concluded our research by determining which factors are most decisive for the female student achievement as a gender approach model. The implication of this study is that thought in solving policy approaches can help close this gender gap, and this finding shows how gender-based policies can close it. Thus, these findings will be a meaningful input for developing studies for researchers, academic discussion, and policy-making to support female students' academic achievement in higher education institutions. In addition, the achievements obtained are expected to be a model for women to increase their capacity as social workers and entrepreneurs.

KEY WORDS: *understanding, gender model, achievement, perception, outstanding, female students*

Introduction

Measures implemented in education reform remain slow and inadequate for the education and training of young people. Educational reform is one of the topics most often associated with youth problems. The inability to provide conditions that meet high educational standards can cost our country far more than just monetary investment. Among other issues, the most common reason for young people leaving is the search for better education in another area or country that respects the gender gap more (Ceha, 2021).

Female students can do better in school because they have higher role models and sincerity (Amalba et al., 2017). Female teachers in Slovak

primary education reportedly outnumber male teachers by a ratio of 9 to 1 (Loziak, 2021). Eighty-six percent of teachers from schools to universities are women. So female students see that they can do well from a young age and give them goals and ambitions to help them succeed (Oktan & Çağanağa, 2015). In almost every subject, female students outperformed boys, especially in Aceh. Perhaps the same story also happened elsewhere. Different conditions occur in India; women's representation is very poor in the education field. In the field of higher education, gender discrimination is rampant (Basantia & Devi, 2022). The growing gap between the performance of female and male students has many researchers worried - about why and how this is happening (Wahyuni & Dahlia, 2020). Despite varying educational outcomes by gender, female students typically have higher educational attainment and achievement. Students from disadvantaged backgrounds suffer the most from these differences but are self-disciplined. To get good grades, many female students make themselves self-disciplined. Female students are more likely than male students to record achievements, pay attention to instructors, and remember lessons more clearly. Female students are more potential to spend long hours in class working on assignments and are less likely to be bored and frustrated (Barndorff-Nielsen, 2014). In addition, while the work of female students was praised for its appearance rather than its content, male students were more often disciplined and treated less gently than female students with their weak contradictions. Teachers of "feminine" subjects such as language and art, on the other hand, spend more time interacting with female students. Based on these differences, this study has tried to listen to the voices of female students who excel in universities in Aceh Province (Fisette, 2013).

Many findings report persistent gender disparities in educational attainment, with female students outperforming all provinces in Indonesia (de San Román & Goiricelaya, 2012). Outstanding students have achieved learning outcomes in both academic and non-academic fields at university, so they should be proud. Achievements in language skills also achieve superior marks in subjects such as math and science. The reason is that by becoming an outstanding student, the opportunity to have a bright future is tremendous. It is due to the ability to hone strength to bring out high creativity (Wang et al., 2021). In Aceh, the phenomenon of outstanding students is also discussed both in public spaces and at home. Many factors cause the gap in academic achievement between genders (Delaney & Devereux, 2021), including internal factors, namely intelligence, attention, interest, talent, motive, maturity, and readiness so that it is easy to find

every year in national exams at almost all levels of education (Hidayah et al., 2017).

This study aimed to gain an in-depth understanding of the educational achievements of female students in tertiary institutions, especially their achievements at the university level in Aceh. This study seeks to respond to students' broader perceptions and perspectives about the gender gap in academic achievement among university students (Netanda et al., 2019). The discussion of this study begins with the factors that cause discrimination at the level of academic culture and gender—understanding approach by examining the perceptions of students who excel in higher education and describing various obstacles to student academic progress (Huffman et al., 2014). Understanding the gender model of education, particularly at the tertiary level, is the first step in this critical discussion. Strategies and actions to empower students in the higher education sector will emerge from it. There are three research questions: 1) What is the gender approach to student achievement in higher education? 2). What factors influence the progress of female students' achievement at universities? 3). What university-specific factors influence female student achievement progress? In order to arrive at this conclusion, qualitative data analysis was performed between 2021 and 2022 on the academic career pathways of 200 individuals who had achieved academic excellence at universities located around the province of Aceh (Sougou et al., 2022).

Gender in the context of education can be understood as a visible difference between male and female students when viewed from their physical behavior (Danielsson, 2012, Guo et al., 2018). Gender comes from the Latin "GENUS," which means type or trait. Gender expression is also understood to characterize the roles of both sexes in all life contexts and expect men and women to a specific personal path. If gender is brought into the world of education and social personality, rules, culture, and self-management, gender will produce differences between males and females. It is the basis of social strata, opportunities, and barriers. Risman (2018) sees differences based on gender as having consequences on many levels, following the basic understanding of 'Gender' as a social structure so that differences between men and women in education can be studied through structural and functional theories (Baily & Holmarsdottir, 2015). In general, gender functional analysis looks at the function of educational institutions and their positive contribution to maintaining the sustainability of the social domain system. Adherents of this gender theory state that education is

training to increase individual human capital, namely the skills and abilities acquired by students; both men and women must be treated equally (Vukmirović, 2019). For that matter, Shaked et al. (2017) believe that schools have a duty and function to instill values that are useful for maintaining a gender balance system in the social aspects and environment. School is also a miniature representation of society that maintains the value and nature of the differences between the two types of people; male and female students (MacNell et al., 2015).

As we know, the norms that apply in Acehnese society are also instilled in schools through the socialization of religious approaches and feminism (Rinaldo, 2013). Likewise, in traditional societies, women are positioned as "second people" in the relations between men and women. Women are always required to look beautiful, soft, and smooth, while men are positioned as 'strong' creatures to protect women (Bose, 2011). In certain societies, female students are not judged by their brains or intelligence but by their physical appearance and are valued more than brains or intelligence. However, some think both women and men have dual roles in society, especially in modern society (Yazilitas et al., 2013). Women often have a role in regulating reproduction, production, and society. The demand for gender equality is one of the human rights of human beings. The right to live honorably, free from fear, and make life choices is not only intended for men; women also have the same rights (Fine, 2010). However, some people see this differently, where men are more focused on the production and social politics. Therefore, not many women are entitled to rights following gender equality. So getting the highest education with high achievement will change the perspective on women. In other words, people assume that women only do household chores to serve the family (Sharpless, 2013).

The image and gender construction that is formed by the community are also socialized through the process of education and career life. Some stereotypes that are detrimental to female students ultimately adorn the mindset of female students in the education process and the professional world (Ertl et al., 2017). In choosing subjects, for example, female students do not excel in the appropriate field of study because they perceive it as a "heavy" field and belong to male students. On the other hand, female students prefer subjects that require "fineness," such as art and dance, hand skills, nursing, and language and literature, so these subjects are considered female subjects of choice (Spacks, 2022). Liberal feminism stems from the structural-functionalism paradigm developed by Merton and Parsons. This

school started to criticize a liberal political theory that upholds the values of autonomy, equality, moral values, and individual freedom but is also thought to treat female students differently. The basic assumptions of liberal feminism are freedom and equality rooted in rationality and the separation between the world and religion (Bimer & Alemeneh, 2018).

The framework of liberal feminism in a universal context is undoubtedly relevant in the context of the Muslim community in Aceh, where they fight for equal opportunities and rights for every individual, including life opportunities and the right of female students to succeed in college with high academic achievements (Lestari et al., 2022). Ideally, female students in Aceh must also be ready to compete in a world full of free cross-regional and continental competitions. Part of this effort can be seen in women's development programs, namely by providing intervention programs to improve family living standards such as education, skills, and public policies, which can increase women's ability to be involved in the community development process (Gelvin & Green, 2014). In other words, the change to be achieved through education is the emancipation of women in all areas of life, such as equality in change, equality of skills, and opening up access to jobs that were previously only accessible to men. At this point, female students can develop themselves in the academic and public spheres by becoming more accomplished and more professional in their respective fields and men as equal partners (Grljević et al., 2019, Lachance-Grzela & Bouchard, 2010).

Many findings report persistent gender disparities in educational attainment, with female students outperforming all provinces in Indonesia (de San Román & Goiricelaya, 2012). Outstanding students have achieved learning outcomes in both academic and non-academic fields at university, so they should be proud. Achievements in language skills also achieve superior marks in subjects such as math and science. The reason is that by becoming an outstanding student, the opportunity to have a bright future is tremendous. It is due to the ability to hone strength to bring out high creativity (Wang, Wang, Wang, Lau, Zhang & Li, 2021). In Aceh, the phenomenon of outstanding female students is also discussed both in public spaces and at home. Previous research has identified gender inequalities in academic success at the university level in numerous Indonesian cities.

All the data point to considerable inequalities in academic success between men and women. The academic achievement of women is higher than that of males. In the United States, women statistically get more

college and graduate degrees than men representing nearly half of the workforce (Burgess, 2019). For additional debate, women outperform males in elementary, high school, diploma, and college levels. Academic success is the same between males and girls in junior high school. The gender gaps in education occur due to the socialization process (internalization, externalization and objectivation), values of gender in the learning process so as to strengthen the gender-role identity of students and can have an impact on the achievement of education that is not optimal (Handayani, 2018). In addition, this study is urgent to answer career challenges for female students entering the world of work and adapt. Phenomenally, the study of the gender approach provides input for achieving achievements to become social capital in the world of work and building gender civilization and alignment with women in Aceh, which is predominantly Muslim, prioritizing respect for women.

To discuss the above issue, we analyzed the results of interviews with around 10% of 400 female students from several well-known universities in Aceh, both private and public (Cardozo et al., 2022). The participants were female students with good grades representing very successful female students. On average, they come from various regions and are students who are proven to have high academic achievement and motivation. Furthermore, this study report will first describe the results of a literature review on how gender is a social issue in education, where there are many factors behind the differences in academic achievement between female and male students (Crisp et al., 2015). Then we continue with the explanation. We then presented the results of the interviews, continued with a discussion of the findings, and ended with conclusions. The end of this report, of course, is equipped with implications for how female students achieve higher learning outcomes than male students. Various arguments and factors make female students stronger than male students, as reported by multiple studies (Gralewski & Karwowski, 2013).

Materials and Methods

This study used the concept of descriptive analysis with qualitative and quantitative approaches. Data from subject interviews were packaged in qualitative form. They clarified the relationship between the three analytical variables. A quantitative approach was used so that each variable used in

this study was interrelated to understand the gender approach from the higher education perspective in Aceh Province, Indonesia.

Design and Approach

This paper presented the results of interviews with outstanding female students from some universities in Aceh province. These outstanding female students represent high-performing individuals (Turner III & Hagstrom-Schmidt, 2022). The results of the interviews show the proportion of academic achievement that is filled by the opinions and thoughts of female students. Their explanations were based on the achievements of female students at several universities. The data was from the collaborative network of universities in Aceh with approximately 20 higher education institutions; this data presented a comparison of student gradations in the top rankings for achieving academic results determined by GPA scores. We analyzed the results of the interviews of female students, especially those who hold ranks 1 to 5 in each of the universities we used for data collection. The results of these interviews described the factors behind the differences in student learning outcomes, especially among female students (Son et al., 2020). We focused on identifying various causes that support and do not support improving student learning outcomes. We explored this approach using a qualitative method in which we evaluated the experiences of female students on how they can become high achievers. Our qualitative data analysis was based on semi-structured interviews following a theoretical approach from various qualitative studies. We believe that interviews with female students have provided an essential part of the gender model approach in higher education, where gender is an academic and social structure that provides certain factors for success (Ceci et al., 2014).

Sample and Participants

We will conduct 20 semi-structured interview questions with high-achieving female students in some private and public universities in the province. We will take the student year from senior students who have shown consistency in their careers and academic achievements, as well as those who have consistently been able to make their position as recipients of assistance and scholarships that are academic achievements (Padilla-Díaz, 2015). To recruit them, our outstanding students collaborated with academics, and those we interviewed recruited using the snowball

technique. Of course, we will do the sampling method homogeneously, but considering the heterogeneity of the students, we interviewed both from campus and their gradations, etc. We consider this problem to be our way of solving the problem (Khan, 2014). Their participants are senior students, and we will interview those with an excellent academic reputation and abilities, not only academics but those who are active as campus intellectuals because there are also students who are academically high but less active while contributing their thoughts at the university, outside of academics. We recorded the results of the interviews with their approval so that we still respect their rights and use the camera as strategic data, including their identity (Snelgrove, 2014).

Interview Materials

Of course, by bringing a recorder to record all interviews and being flexible in developing their views on intellectual cases, including literary culture and learning and evaluation methods systems, all of these will be materials or factors that contribute to their success (Alshenqeeti, 2014). Student achievement and independent learning success in academics are not determined by academic factors but by personal characteristics and the student's family life. Therefore, we will see how the perceptions of people who still act like obstacles in learning cause various solutions when faced with learning problems. We understand that academic life is also no less competitive than career life (King et al., 2018).

Statistical Analyses

The data obtained was validated by experts and analyzed for validity and reliability based on Cronbach's Alpha Reliability and Pearson validity. The ranking of the most influential variable factors was analyzed using the Wilcoxon Signed Ranks with a probability limit of $p < 0.05$ and a correlation value ($r = 1$).

Results

Table 1: Demographics of the research sample.

Demographics of the Research Sample	N	Percentage
Gender		
Male	120	30%
Female	280	70%
Age (years)		
18-25	350	87,5%
26-45	50	12,5%
Level Study University		
Semester VI	150	37,5%
Semester VII	160	40%
Semester VIII	90	22,5%
Cluster University		
State University	7	35%
Private University	13	65%

Source: Primary data

The results section of this study describes the results of data analysis in the form of interview data with some female students; related to the gender approach to student achievement, factors that influence the progress of female students, and university-specific factors that influence female students. The data from the analysis is also supported by evidence from a similar study which backs up our findings on a gender perspective study and achievement of female students at several universities in Aceh.

Table 1 describes the demographics of the study sample based on gender, age, years of study, and the university cluster where we obtained the data starting with a sample of male respondents who took part in the interview, namely 30%, and female students, namely 70%. Furthermore, between the ages of 18 and 25, 87% of students took part in the interview. They were aged 26 to 45, 12% of those who participated in our vote. At the same time, the college level of respondents who study in the sixth semester is 37.5%. Seventh-semester students 40%, and eighth-semester students 22.5% are willing to respond in group discussion forum interviews. All respondents represent seven state universities and thirteen private universities.

Table 2: Gender Perspective on Student's Achievement

Study Variable	Interview Questions	Calibration (Validity)	
		Expert 1	Expert 2
The gender approach to student achievement	1. How do you prepare to do daily course assignments?	0.7	0.8
	2. How do you deal with various challenging and piling-up assignments each semester?	0.8	0.8
	3. How do you face the course expectations that are so challenging and in demand?	0.8	0.7
	4. What do you do to get high marks on coursework?	0.8	0.7
	5. How can you get high marks while having few supervisors?	0.7	0.8
Factors influencing the progress of female students.	1. Is your college environment comfortable and conducive to success?	0.8	0.8
	2. Are you serious about planning any action activities related to academic content?	0.7	0.7
	3. How are short-term and long-term college plans prepared?	0.8	0.8
	4. Is there support from home and parental involvement?	0.8	0.7
	5. What are the commitments in everyday life?	0.8	0.7

Study Variable	Interview Questions	Calibration (Validity)	
		Expert 1	Expert 2
University-specific factors influencing female students.	1. How does the campus position support lectures?	0.7	0.8
	2. Do lecture facilities deliver material based on more than theory?	0.8	0.8
	3. How about the reading room and library? Does your campus have those facilities?	0.8	0.7
	4. Does your campus have facilities such as prayer rooms and cafes to support college needs?	0.8	0.7
	5. Does your university provide dormitories?	0.8	0.8

Score 0.7: good, and a value of 0.8 is excellent. Source: Primary data

Table 2 describes the attainment of the scores of the respondents' interview questions in the context of the achievement of female students, which we divided into three categories; the gender approach to student achievement, factors that influence the progress of female students, and university-specific factors that influence female students. Each type confirms the achievement of the quality score of the answers relevant to the excellence variable of female students. A value of 0.7 describes a good achievement, and a value of 0.8 is excellent according to the achievement of the results or achievements of female students according to the analysis of interviews with respondents.

Table 3: Validity and reliability of the variable study

Variables Study	N	Pearson Validity	Cronbach's Alpha Reliability
Gender approach to student achievement	400	0.73	0.81
Factors influencing the progress of female students	400	0.89	0.82
University-specific factors influencing female student	400	0.91	0.95

Source: Primary data

Table 4: Wilcoxon Signed Ranks Test of Gender Perspective on Student's Achievement

Variable evaluation	Rank	N	Assumed of Value	p-value	Analyses
Gender approach to student achievement – (with) Factors influencing the progress of female students	Positive Rank	227	Gender approach to student achievement < Factors influencing the progress of female students	p<0.05 (0.000)	Two hundred twenty-seven respondents agreed that the gender approach influenced the achievement of female students in the academic environment. Understanding gender as one of the achievements achieved by female students is highly dependent on carrying out the concept of gender properly.
	Negative Rank	151	Gender approach to student achievement > Factors influencing the progress of female students.		As many as 151 respondents agreed that the gender approach did not entirely influence the achievements of female students. Many of these subjects understood that their accomplishments were not completely due to the gender approach. Other factors determine their success, such as the academic atmosphere and the uniformity of academic attitudes and actions.
	Ties	22	Gender approach to student achievement = Factors influencing the progress of female students.		As many as 22 respondents agreed that the achievement of female students was not related to the academic gender approach. It means that without a gender perspective, they also achieve exemplary achievements in their university environment.

Variable evaluation	Rank	N	Assumed of Value	p-value	Analyses
	Total	400			Note: The three assessment aspects show a significant difference (p <0.05), implying that in order to accomplish the goals set for female pupils, the gender approach is a strategy and a consideration for career development
Factors influencing the progress of female students – (with) university-specific factors influencing female student	Positive Rank	189	Factors influencing the progress of female students < university-specific factors influencing female student		As many as 189 respondents agreed that university involvement in implementing a gender approach was a determinant of the progress of female students' achievements. Universities feel obliged and discipline the understanding of gender academically to improve student achievement.
	Negative Rank	199	Factors influencing the progress of female students > university-specific factors influencing female student	p>0.05 (0.423)	A total of 199 respondents agreed that university involvement in implementing a gender approach did not fully determine the progress of female students' achievements. Universities need to choose a gender approach to take action academically to increase student achievement.
	Ties	12	Factors influencing the progress of female students = university-specific factors influencing female student		As many as 12 respondents agreed that the university's involvement in implementing the gender approach had no relationship with the achievements of female students. It means that the gender approach is not related to academic achievement.
	Total	400			Note: The three aspects of the assessment showed no

Variable evaluation	Rank	N	Assumed of Value	p-value	Analyses
			significant difference (p>0.05), meaning that the university's involvement in implementing the gender approach did not fully influence the academic achievement of female students		
University-specific factors influencing female student - (with) Gender approach to student achievement	Positive Rank	172	University-specific factors influencing female students. < Gender approach to student achievement		A total of 172 respondents agreed that the university's involvement in implementing a gender approach was a determinant of the achievement of female students. It means that the academic gender approach is significantly related to academic achievement.
	Negative Rank	205	University-specific factors influencing female student > Gender approach to student achievement	p>0.05 (0.517)	As many as 205 respondents agreed that the university's involvement in implementing a gender approach did not fully have a significant impact on changes in the achievement of female students. It means that the academic gender approach does not entirely determine student achievement.
	Ties	23	University-specific factors influencing female students. = Gender approach to student achievement		As many as 23 respondents agreed that universities' involvement in implementing a gender approach had nothing to do with changes in the achievement of female students. It means that the academic gender approach does not determine student achievement.

Variable evaluation	Rank	N	Assumed of Value	p-value	Analyses
	Total	400	Note: The three assessment aspects show no significant difference (p>0.05), but the university has a significant influence on the academic achievement of female students		

Source: Primary data

Table 3 reports the validity and reliability values of the research variables, and the three variables show that Cronbach's Alpha Reliability value has strong validity. It means that the questions and matters obtained from the respondents have strong validity and are feasible to be continued in the analysis of the relationship between variables. Table 4 reports the study of the variables most related to the application of academic gender to improve the performance of female students. The Wilcoxon signed ranks analysis shows that the Gender approach to student achievement has a tremendous influence on the Factors that influence the progress of female students. It means that applying the concept of academic gender has a good effect on the academic achievement of female students.

Figure 1: Understanding Gender Approach to Educational Achievement. Correlation value 0.8-1 (strong correlation) and 0.5-0.79 (Moderate).
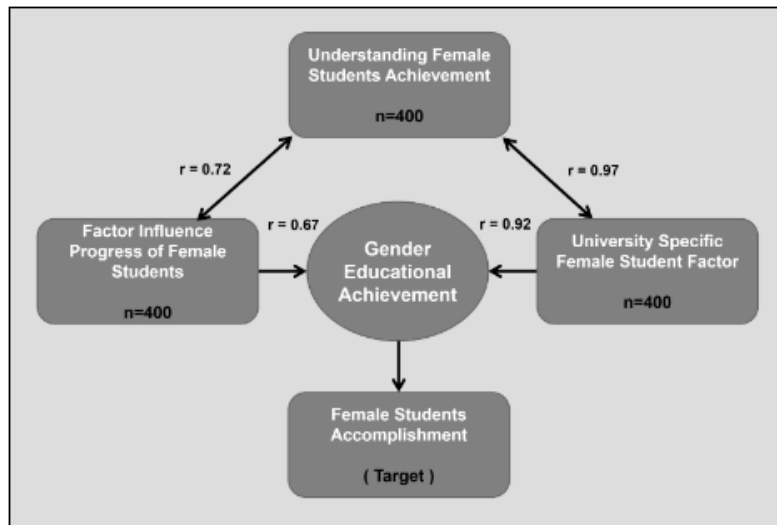
Figure 1 reported that understanding female students' achievement provides a reciprocal relationship to the University specific female student factor and the influence factor of the progress of female students. These two factors determine the influence of gender educational achievement. The excellent relationship between these three variables can determine female student achievement at the university level, society, and the world of work.

The findings of this study as a whole explain the tendency of female students at our twenty universities to their voices through FGD interviews, revealing that female students performed better in courses. It is proven that female students are more thorough and organized than male students. For example, girls spend more time on their work, are more careful presenting it, and are better at meeting readiness. Models of gender gaps in academic achievement vary widely by subject. As we can see from the data above, for female students, Aceh far outperforms male students based on their confessions. It includes academic grades, awards, competitive results, and postgraduate experience. Female students demonstrate academic achievement, involvement in campus organizations, contribution to the community, and resilience. Female students perform better because they have more positive role models in college. There are about 60% of lecturers supporting female students. They see those female students can achieve high results, and that gives them goals and ambitions, which may make them want to do well in college. Teachers may unknowingly reward female students who display traditional behaviors, such as poise and tidiness, that make life easier for students. According to respondents, female students are routinely given better grades in class than males of the same academic ability.

Regarding the specific factors of university support for the advancement of female students in Aceh, several variables are consistent with student expressions. These are the quality of academic services at several universities that have faculties supported by the facilities offered, including several scholarships in Aceh, the hospitality of the academy, the location of the campus, which is not so far away, as well as academic guidance and a lecture service system that makes for the rest of the women possible to have the desire to attend the lectures. The following is what they mentioned with library facilities both online and in person. Assets and good universities are maintained to increase other lecture resources, then supported by insurance and health facilities, including transportation provided by the Aceh government, which is free; then student dormitories

which are very comfortable then supported by academic services, which are now fully automated starting from registration, payment of tuition fees and an academy activity governance system for students. In addition, the average university already has accurate data, including the management of documents, announcement reports, and class schedules, which have been well prepared on average. Every university is familiar with various scientific forums for discussion in person and online after the pandemic. The most supportive is the management and utilization of website-based and mobile technology which can be accessed free of charge to accelerate student services and offer various scholarships. The reasons for the above support factors have enabled female students in Aceh to receive the best service. We studied the impact of excellent support and service at various universities on their success and achievement.

Figure 2: Gender Student activities in the university. Left (Drama club, photo credit by Herman RN, USK, 2022), Middle (English club, photo credit by Kismulla, USK, 2022), and Right (Fundraising, photo credit by Serambinews.com/Saiful Bahri, 2022)

Figure 2 (Left) shows several university student drama clubs and extracurricular programs that complement lecture activities, especially before the pandemic. Drama activities and other artistic activities, they said, helped to improve the quality and achievement of female students' motivation to better balance between college and similar extracurricular activities. Additional events such as drama clubs are a forum for female and male students to develop various academic skills such as initiation and positive ideas towards creativity with activities relevant to educational goals and make their institution of study more alive. Through this activity, they believe it is right to develop their potential and support the acceleration of academic achievement.

Figure 2 (Middle) shows that the English clubs held at several universities in Aceh have encouraged improving foreign language skills and the development of campus activities that positively impact academic skills, especially foreign languages. Through a series of extracurriculars, students have the goal of language development with very supportive campus facilities, where they will develop skills and improve foreign language skills through practice. What they do as an activity to develop foreign language skills is a part of what they believe: that practicing foreign language skills both in the classroom and in the English club is a part of the skill development and is also helpful in improving and achieving good results in other subjects due to the fact that English is the language that is mainly used in lectures and activities where there is much literature in English. Apart from being a way to fulfill time with positive and fun things, this program has goals, various games, and increases college achievement.

Figure 2 (Right) shows that students' fundraising activities in Aceh have become an academic tradition. This activity invites people outside the campus and any parties to care about and help with university fundraising activities, usually to help victims of natural disasters and others. Students, especially women, are highly motivated to do this fund racing, which is part of increasing student awareness and dedication to the community that needs help. This fundraising certainly impacts actualization and increases student achievement whereby caring and maintaining relations between the academic community and the outside community for awareness to do charity to help and get closer to the community. So, with this fundraising, students are practicing to become a party that can invite the wider community to provide sustenance and other things to help those who need assistance.

Discussion

In this discussion section, the authors explain the data findings related to the increase in gender in college achievement of female students in Aceh. In this section, we also discuss this finding, which later is supported by several results on similar themes but in other application contexts, through a discussion that seeks to explain the understanding of the gender approach in academic achievement in terms of the learning outcomes of Acehnese female students. With these discussions, we understand that the achievement of learning outcomes for female students is closely related to various factors

inherent in Acehnese female students pursuing academic careers. This finding has produced significant characteristics. A striking increase in learning comes from the achievement of male students' college results, which is also influenced by factors specific to each University where Acehnese women are. We managed to interview 400 students with a system involving representatives; several of their achievements were expressed through several questions that were assigned to the group. Generally, the gender approach to academic achievement has answered the study question. It is the result of the mass work of women related to all the hard work of carrying out assignments and then fulfilling lecture expectations with various challenges and obstacles.

Likewise, the various supporting factors impacting Acehnese female students' academic success are the university environment, lecture content, and the multiple commitments they take seriously to excel. Therefore, the unique factors that each university owns also have an impact on the academic achievement of Acehnese female students, which include, for example, the support of faculties, learning materials that are relevant to course objectives, space, and campus support such as libraries, information technology facilities, the provision of scholarships and also dormitories. For a large number of Acehnese students, it is, among other things, the results of interviews with several discussion groups during data collection.

a. Understanding of the female student's achievement

Our recent interviews with 400 female students from representatives of 20 universities in Aceh Province confirmed our assumption that a gender approach to understanding educational achievement had gained insight into the perceptions of female students who excel. We used a qualitative question-and-answer method to answer the study's hypotheses to explore the drives and motivations behind academic achievement. Undeniably, girls perform very well, even in science-related subjects where boys are considered better (van der Vleuten et al., 2016). The gender gap in female students' achievement of learning outcomes in higher education is no longer a mystery. Review data from several previous findings supported by our interviews with 400 female students and a recent end-of-semester report at Acehnese universities found that 71% of college graduates in Aceh, female students completed their bachelor's degrees in 2021 with average grades. The average GPA is 3.80, compared to 61% of male graduates with a 3.30 GPA. The percentages were 71% and 61%, respectively, in 2021. In other words, female students have a higher graduation rate with higher

achievement than college as evidenced by a higher GPA than male students. These results raise a difficult question: Is it as if higher education was established to encourage girls to study with high achievement and trap boys with intermediate results? (He et al., 2020).

The academic achievement of female students based on our interviews is realistic. The results of motivation and enthusiasm for achieving learning goals with female students have proven to have answered our assumptions and scientific evidence from previous studies in the context of higher education outside the Aceh Province, and this is because outstanding female students do their best for their schools (Barone & Assirelli, 2020). It follows the expression in the interview, which proves that students' readiness has started since they were in school. They generally have the desire to be able to enter college and have realistic aspirations to continue teaching at a high level while continuing to excel. Based on the admission in interviews, we found that most girls with good self-management tend to get high learning outcomes (Wilson & Kittleson, 2013). Others said that the support of teachers and parents alike encouraged them to stay motivated and confident in the learning they were facing. The enthusiasm given by the teacher refers to disciplined behavior, such as being willing to carry out assignments and assessments on time and always being active in class, paying attention to assertiveness, listening and following teacher directions, and academic coordination (Kretschmer et al., 2018).

In interviews at other campuses, we also found that female students in Aceh have seriousness in their academic duties stating their abilities could be higher. However, they are determined to succeed in social relationships (Muluk et al., 2021). Girls in some universities have demonstrated better self-management skills than most male students. For example, university colleagues responded to the interview by saying that *"we study like playing* (P. 01)"*, meaning that they enjoy no matter how difficult the task given by their lecturer is; they also said that "*we can be calmer and more patient to do all difficult task"* (P. 02). So, we see that girls' self-management and self-control in terms of following instructions and what rules are in this university school makes them more focused and less confused (Sage et al., 2017). Likewise, teaching followed by evaluation with a learning system accustomed to solving problems through strong communication convinces us that female students are indeed ready when challenged and always are. They said, "*we are very ready when challenged with hard work and hard situations in academic matters"* (P.03). This is an example of good self-

regulation, especially in every rule and discipline applied to be carried out correctly and thoughtfully. In this free interview, we find that all academic success of female students starts from self-regulation; then, they stay motivated and tenacious, while boys cannot keep up with the achievement scores of female students. It is what female students said, "*we are even willing to do more work and without being controlled in class and outside class*" (P. 04). This is because the self-regulation assessed by female students is confidence (Herndon & Bembenutty, 2017).

Furthermore, female students benefit from this self-discipline during school and family education. One participant admitted that they outperformed male students in self-discipline in university learning activities. It significantly contributes to their higher grades across all majors. We found that female students were better at reading the instructions and exam rules before moving on to test-taking work (Cohen, 2021). Likewise, female students pay attention to the teacher instead of daydreaming, take homework seriously over playing online games or TV, and stick to heavy and long-term assignments despite boredom and stress. Hence this skill is ordinary among female students. This cognitive expert also found that female students spent almost twice as long on their homework completing and starting it earlier than male students. Even in mathematics and foreign languages, which have traditionally been the stronghold of male students, female students scored higher on average than male students in all subjects and non-academic activities (Ayub et al., 2014).

The learning factors of female students' academic achievement that we get through semi-structured interviews such as *high self-discipline*, as stated by participants (P. 05),, *and self-awareness, as voiced by participants (P06), or seriousness in planning any activity actions related to academic content (P. P.07), set goals and set short-term and long-term plans (P.08), and keep trying even though sometimes it is challenging* (P.09) despite frustration and failure at the beginning of the lecture. Students' self-awareness is generally considered an adult's intelligence, not a habit for young students. When we interviewed female students, the entire college experience and students' personal lives played a significant role in most female students. The days are long gone when a female student could fail many assignments from the teacher throughout the semester but still get good grades by studying patiently and passing the major course exams. *If we interview how to get high marks and about balancing with work outside of academics, female*

students can complete them on time, marked by timely submission of assignments (P. 10).

When referring to the opinion of psychologists, female students in college perform better in the environment than male students because they tend to focus more on learning through their study habits and assignments. Generally, *female students are more likely to plan academic goals to be achieved and are willing to work hard to achieve them, no matter how difficult it is* (P. 12). They are also more motivated to assert themselves so that teachers feel the effort of their students and are more likely to get high marks than male students to feel intrinsically satisfied with the whole process of organizing college work.

Since interviews with university representatives in Aceh, the overall experience of the university plays a more significant role in the power of academic success for female students compared to the position of male students in achieving learning outcomes. We ask, what do female students think about male students responding to college assignments? They answered that male students responded differently than female students (P. 13). Participants added that male students focused more on learning performance rather than on self-defense and problem-solving motivation (P. 14). Next, *when we asked questions about competition and learning struggle, female students answered that female students use competitive instincts, they do not want to lose to male students even though they are dominating every day* (P. 15). Female students state: "When we study and take exams, we are apprehensive about not preparing well. However, *for most male students, the exam was like a routine that did not make their hearts beat fast (P. 16)*. We female students believe that an excellent grade is the goal and a public display of excellence when we do well on every assignment and exam.

On the other hand, we also asked female students' responses when there were many coursework assignments. They answered that the stress they experienced was mostly the ones female students could deal with naturally (P.18). With the condition that female students are calmer when doing assignments and exams, they can be sure that their performance on the evaluation will be acceptable so that a more accurate assessment of the actual abilities of female students can be made. The overall conclusion of all participants is that female students have productive abilities on the test. In contrast, male students are more anxious about the test. Despite the weak nature of female students, they are very responsive and never give up when

they feel they are often supported in many academic cultures and social life, which of course, has an impact on the smoothness of lectures and educational achievement.

In an environment where homework and organizational skills significantly affect their grades, it is easy for boys to feel alienated. However, small changes in education policy could give male students better opportunities. It is shown by what happened to one of the participants a few years ago when the lecturer realized that many female students who did well in the exams continued to get A+ every semester. On average, about 20% of female students at each study program level consistently receive A and B grades because they perform well on significant university subject area tests. It happens because the assessment culture in higher education is constantly updated and takes sides with the achievements of female students. Likewise, administrators wisely provide female students with opportunities and improve the evaluation system to motivate female students to continue to excel by working hard on assignments and semester re-exams.

a. Factors influencing the progress of female students

As we got in focus group discussion interviews with representatives of 20 universities in Aceh, we can conclude that it is related to what factors have contributed to influencing the academic achievement of female students regardless of the elements provided by the university with all the conveniences and facilities; among other things, female students pay full attention to every communication both in the lecture hall and on other occasions with lecturers and supervisors. Likewise, they are very good at time management, especially in submitting assignments for each subject. As revealed through the interviews, female students had more self-discipline and self-awareness, as stated by most interview participants. The majority of female students said they had more explicit college goals. Then they were also challenged both in lectures and in everyday life. We also noted how female students got high scores because they could balance classes and other activities, which did not harm lectures. Another exciting thing is the willingness of the mighty women to plan academic goals and what they will achieve through hard work, and it is okay with how difficult and challenging each subject is assigned by the course supervisor.

Furthermore, related to competitiveness in learning, female students answered that they were indeed more competitive by instinct, and most women were more active and concerned with learning routines. Hence, they were the easiest to complete assignments and even end-of-semester exams.

Judging from the acceptance of each project, women have patience and flexibility in preparing material for exams, which rarely happens to male students. In terms of the organization of learning skills, female students emphasized the routine of wanting to carry out more assignments, so many lecturers feel sympathy for the tenacity and patience seen from the almighty learning culture of female students in Aceh. They said they pray a lot to get higher scores and achievements than most male students. These are, among others, some of the internal factors of female students in Aceh in learning management so that they become academically successful participants.

b. University-specific factors influence female students

Recognition of female students at several universities in Aceh and academic factors include essential supports that outstanding female students generally recognize. With all the support, the college environment has helped students get what they need when at college (Mersha et al., 2013). These include lecturers who help, lecture facilities such as internet access, and lecture rooms for face-to-face classes. *The average in our campus is good because the campus is separated from the hustle and bustle of the city (P. 20). Besides that, students also have language lab facilities and other subjects, which are relatively good, although not as good as most campuses outside Aceh Province (P. 21). As an Islamic law area, students are also facilitated with prayer rooms with religious activities and practice pray. They are close to the library (P. 22).* Especially for students majoring in sports, they have sports facilities which are also open to non-sports students (P. 23). In addition, *the kindness and help of the teaching staff have also made us confident to go to college, even though sometimes during heavy work assignments (P. 24)*. The auditorium is also our support for academic achievement event meetings. In the category of factors related to academics that we have identified above, it is evident that they have produced results for college achievement, significantly strengthening female students (Dube & Mlotshwa, 2018).

The next success factor for Acehnese female students is their recognition that the campus environment and teaching methods of lecturers have contributed to the ease for female students to learn more independently and responsibly. Some female students believe that the capacities and abilities of the lecturers have contributed to their learning achievement (Wibowo et al., 2020). *For us, the essential thing from campus is the support of lecturers who help us achieve optimal study results (P. 25)*. Some lecturers can master the audience well and interact in class so that students

get what they are looking for (P. 26). We believe this is an essential part of supporting outstanding female students. It is the way the lecturer motivates students to continue learning according to expectations. They said that the average lecturer in Aceh has dedication and commitment to teaching supportively by targeted teaching methods, so this method has attracted students, especially women, to activate themselves with learning (Kemal et al., 2019), especially now that teaching is supported by technological infrastructure with all educational innovations. The support of qualified lecturers motivates female students to be in school, especially after the tsunami, where activeness is not only in actual classes but in distance classes. The role of lecturers is very supportive of student achievement in each program and university's academic field. *The lecturers we want are good ones and can create a pleasant lecture atmosphere to stimulate students' thinking and creativity to continue to be independent students who achieve maximum results (P. 27).*

Boy students also have higher dropout rates. Based on a random sample of schools, a Swiss study (Hadjar & Lupatsch, 2010) showed that girls scored significantly higher in school than boys in music and language (German, French, and English). There are no gender differences in educational success in other subjects. Boys have no advantage over girls. According to a Luxembourg-based study (Glock & Klapproth, 2017), boys are more likely to be placed in the junior high school pathway than girls. However, this difference diminished when academic achievement was adjusted, indicating no gender difference in tracking decisions when boys and girls performed the same academically.

However, school grades point to an orientation hole: Girls usually do better than boys. The PISA (Program for International Student Assessment) competency test in languages (Organisation for Economic Co-operation Development, 2013) shows that girls perform significantly better than boys. In many countries, women enroll in higher education foundations more considerably than men. However, men still have a higher transition rate than women or the proportion of eligible students starting higher education studies. "Leaky lines" are still prevalent in academia, according to Leemann et al. (2010): The majority of academic positions are held by women. However, a few women hold full professorships at the highest academic levels.

Gender differences in education can be explained in various ways, both theoretically and empirically. Educational investment and academic

motivation explain the long-term situation of being under-represented and underdeveloped. According to human capital theory, Sasso et al. (2020), investment in women's education will only be beneficial in 2020 if they can translate their education into employment, status, and income. From this point of view, the traditional pattern of women's low educational participation is mainly due to their greater involvement in household and child-rearing activities and lower employment opportunities. There is a strong correlation between changing gender stereotypes and increasing women's educational attainment and labor force participation—partly due to increased demand for service-related jobs. The modernization of life plans, in particular the diminishing social and economic significance of marriage and the increasing importance of women's participation in the workforce to earn a living, as well as institutional changes in the educational and social systems that make education more attractive to both men and women, has led to significant changes in prospects and plans of women's lives over the last few decades (Breen et al., 2010).

The increasing interest of women in education increases enrollment in high schools, and the increase in attendance at colleges and universities is mainly due to higher educational returns for women (Griffith, 2010). As a result, it can be argued that the main factors contributing to the increased success of girls' education are the shift in girls' educational aspirations and the anticipated increase in opportunities for women in the labor market, particularly in public services (Nilan et al., 2011). However, career and education choices continue to follow a consistent pattern. Because of socialized gender stereotypes, men are more likely to choose careers with more authority, prestige, and status, perpetuating gender-based interests and life plans. According to Erickson & Stacey (2013), women are more likely than men to work as teachers, nurses, or in other service sectors.

The characteristics of university students and issues of motivation, behavior, and attitudes have been the focus of several aspects of the academic debate surrounding successful female college students (Erduran et al., 2020). Female students are more likely to be upbeat, interested in college activities, and motivated by personalization. Girls also score higher in terms of their subjective well-being in college. Gender differences in behavior also influence educational success because good behavior will also affect how well students learn. Most approaches emphasize various college-based behavior patterns. Girls' high academic achievement is linked to antisocial and incongruent behavior in student circles. The findings

demonstrated the gender differences in the behavior: girls were more likely to act casually, like not wanting to interrupt the class, being invisible, and engaging in violence. According to Sullivan et al. (2014) female students were more adaptable. Girls exhibit passive behavior and avoid violence more frequently in response to failure and frustration. It suggests that disruptive behavior that prevents girls from learning backward and is rarely punished by teachers is linked to educational success that is more satisfying. Furthermore, girls possess what (Hadjar et al., 2014) we refer to as "nerdy syndrome." It has been hypothesized that girls typically have a higher sense of obligation and are more willing to work hard.

Additionally, outside-of-college recreational activities are essential. On campus, female students are more interested in their spare time than male students. Media consumption is frequently mentioned as a critical factor in girls' academic success. Prince et al. (2020) say that girls spend more of their free time doing essential things than boys do, like playing video games and watching inappropriate movies on computers. Female students may pay more attention due to their cognitive abilities, which are necessary for activities related to their coursework (Shahzad et al., 2021).

d. Female Student accomplishment

As stated by the respondents, the achievement of Acehnese female students' academic success is relevant to the three variables used in this study. The three variables are the gender approach to student achievement, factors influencing the progress of female students, and university-specific factors influencing female students. The three variables have synergy in achieving student achievement, especially academic achievement. The academic achievement of Acehnese female students is one of the motivations and self-confidence of female students, such as institutional support such as exceptional academic advisor support, good orientation, adequate facilities, adequate instructor teaching skills, comfortable classrooms, positive lecture climate, partiality for women, and personal challenges such as good socialization, high interest, and self-confidence. In addition, female students accept responsibility, discipline, manage time, stay ahead, ask for help, not give up easily, communicate with instructors, have more lecture items, and support the family.

All the factors above are the main things that affect the achievement of female students. Results have shown that students with involved parents achieve higher grades, have better attendance, and have greater long-term aspirations. The academic achievement of female students is influenced by

the support of the facilities they get from the university, so it becomes a determining factor for students achieving academic achievement. Academic achievement can refer to completing educational benchmarks such as a bachelor's degree, measured through ongoing exams or assessments.

Conclusion

Concluding the study, which aims to understand a gender approach to educational attainment in the perceptions of high-achieving female students, we would like to conclude that the results of this study have responded to the research question where a gender approach to student achievement in tertiary institutions is influenced by various factors that have influenced academic success as well as the aspect of university support with all programs and facilities.

We have obtained scientific evidence from a study to gain an in-depth understanding of the gender approach to improving learning outcomes at the tertiary level through a series of questions and answers in a focus group discussion meeting with 400 female students from several state and private universities. The internal factors of Acehnese female students include several issues that are internal to students, such as the habit of learning in a relaxed manner, doing all assignments with fun but seriously, being accustomed to learning, being full of expectations, and having the self-awareness to continue to participate in all academic and extracurricular activities.

While the supporting factors which are typical of university support for the success of Acehnese women's studies include the location of the campus, which is easily accessible to lecturers who have sufficient teaching experience, the support of adequate facilities, and the freedom of the academy to do learning activities to improve outcomes as well as the availability of scholarship support and dormitories, where some outside Banda Aceh students can live, these are a series of evidence from hearing the voices of Acehnese women playing through focus group interviews, supported by scientific evidence from previous studies. It is hoped that these findings, especially when the variables of academic success, student internal factors, and the university's full support should become a reference that is useful in gender study activities both in the educational context and decision-making related to the gender approach at the higher education institution.

In addition to the advantages of the findings of this study, conditions with limitations and weaknesses can come from the study's design, the problem formulation, method design, and data analysis to the final report. We hope for constructive input and suggestions for future improvement of similar studies.

Finding of Research

Most universities in Aceh, Indonesia, have implemented a gender approach academically to improve the academic achievement of female students. What is interesting from the findings of this research is that respondents from universities who do not apply gender principles have exemplary academic achievements and have an understanding of literary gender. It means that implementing the concept of educational gender is integrated into academic policies so that indirectly gender values have been implemented in academic activities even though they are not written down.

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Conflicts of Interest

The authors declare no conflicts of interest.

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