



Analysis of the Need for Strengthening Learning Skills of New Students in Post-pandemic Learning Based on Gender Perspective

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Abstract. Study skills are an important asset for students to achieve successful university studies. This study aims to compare differences in the learning readiness of new year students, both male and female. The research, which was conducted at the State University of Malang, involved 56 new semester students in the fields of social, humanities and exact sciences. Data was taken by distributing an inventory of learning skills in higher education which contained 8 important aspects with 62 statements. After going through data analysis through a comparative test, it was found that there was no significant difference regarding the learning readiness of new students from the social sciences and science and technology clusters in terms of gender perspective. The results of this study recommend the need for academic guidance services for new students related to learning skills in higher education regardless of gender which means that it is given for all. The required learning skills consist of (1) time management and procrastination; (2) concentration and memory; (3) study aids and note-taking; (4) strategies for dealing with exams and overcoming anxiety; (5) organize and process information; (6) increase motivation and manage self-attitude; (7) read and select the main idea; and (8) smart way of writing scientific papers.

Keywords: Needs Analysis · Study Skills · New Students · Post-Pandemic · Gender Perspective

1 Introduction

In 2015, Indonesia had at least 121 state-owned universities and 3,104 universities owned by private institutions (Central Statistics Agency (Badan Pusat Statistik, 2017). New student registration for the 2020/2021 batch did not experience significant changes, even during the ongoing pandemic. in the midst of life's activities. Students who successfully complete study assignments at the high school level, then continue their education to higher education according to the choice and formation of the needs of the number of

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students who can be accepted through national selection and self-selection. Education costs are one of the most important factors Many influence the choice of students when choosing a particular college or university [1]. New students who will take part in learning activities at universities need to prepare all forms of technical and non-technical learning tools that support the completion of learning tasks as well as developing their potential independently. realistic. Technical devices relate to facilities such as stationery, laptops, smartphones and other applicable media [2-4], while non-technical devices relate to the soft skills and hard skills of students while studying in college.

Students are the main force of future innovation [5]. New students at the college come from various high schools and vocational high schools with their own unique characteristics. Race identity, gender, socioeconomic status, and ability affect student satisfaction in achieving learning goals in college [6]. The identity of these students on the other hand is also one of the main challenges for higher education teachers, which is related to efforts to design learning activities that allow students to acquire sustainability competencies effectively and while maintaining the unique identity of each student [7]. Students need appropriate learning skills and techniques to communicate and collaborate with other students as well as to collect, articulate, organize, and express knowledge and information through digital technology and the use of information [8]. Student learning skills are also supported by empirical logic which shows that every year universities experience changes and affect student academics. The second year of college is seen as a period in which students face increased academic, developmental, and social demands, but institutions tend to provide less support than the first year [9].

One of the identities of the success of studying in higher education is determined by the gender roles that students have. Gender interact with each other [10]. Gender issues in higher education institutions have attracted the attention of researchers in recent decades. As a result, many studies call for greater gender equality between men and women in universities [11]. The conditions relating to the identity of student learning success have been studied in recent years, the level of success of various groups of students in higher education has received considerable attention, with gender and ethnicity identified as the main attributes predicting differential achievement of 'good degrees' or learning success [2, 12]. Student success is needed to meet the needs of success in the 21st century which requires rigorous academics, cutting-edge technical skills, and a foundation that supports sustainable learning and growth by teaching students how to learn and to address critical risk factors that may derail their dreams for college and career success [13].

Student success is a hot topic of higher education [14]. Learning activities that support student success in college are certainly different from the learning situation in high school or vocational high school. Several new conditions experienced by students such as roles, duties and responsibilities present motives for achieving complex learning goals. Activities outside of lectures available at universities also provide opportunities and challenges for students to increase the target points for learning success. Physical activity and academic outcomes may produce different mutually influential relationships between students compared to younger age groups [15]. In addition, activities outside of college can also have a positive impact on increasing academic achievement, as the results of the Historically Black University research show that women show the greatest

increase in all categories, with significantly higher GPAs and retentions, for all groups. GPA and retention of male participants, overall, were not significantly higher [16].

Gender role identity becomes a set of behavioral and social norms that are seen as appropriate for the different sexes in social relations [17]. Gender identity offers many references to social functions that a person performs in the environment and generates local stereotypes but has consensus value. The male gender stereotype is characterized by task-oriented tendencies such as: assertiveness, independence, ambition, and determination, which are considered ideals of masculinity. On the other hand, affection-oriented characteristics such as kindness, nurturing, affection, and tenderness characterize the stereotype of women, or femininity [18]. Students and college students as individuals studying in higher education undergo both academic and non-academic activities in accordance with the gender principles they adhere to. The gender roles of women and men in social activities are carried out in a unique way, where they develop gender roles in social life [10]. Investigating the evolving gender roles over time is critical to understanding gender inequality and its dynamics [19]. Gender regulation helps students identify the potential as well as the challenges of social roles that arise when carrying out study assignments in higher education.

Learning skills are the main capital for students in meeting the demands of their assignments during their education in higher education. Students' expectations of achievement are not merely expressed as mere commitments, but concrete, measurable actions are needed so that achievement and successful learning can be achieved consistently and responsibly. Learning skills related to academics, which include "cognitive, behavioral, and affective tools and abilities" play a strategic role in higher education in guiding the success of learning in higher education [20]. The success of studying in higher education is also strongly influenced by the academic abilities possessed by each student in completing lecture assignments [21].

2 Method

This study used descriptive qualitative method. The purpose of descriptive research is to find out descriptive information about the variable being measured without manipulating the condition of the variable [22, 23]. Technique of collecting data using survey technique. Determination of research subjects using random sampling technique with the number of subjects 56 students from the Soshum and Scientek clumps. Collecting data using a scale of successful study in college developed by researchers with a total of 62 items.

The scale of learning success in college meets the criteria of validity and reliability. The validity test using the Product Moment formula on 60 test subjects showed $0.559 > 0.2108$ or $r\text{-count} > r\text{-table} (60)$ then it was declared valid. Furthermore, the learning success scale was tested for reliability using the Cronbach's Alpha formula. The results of the reliability test showed that Cronbach's Alpha score was $0.948 > 0.60$, so it can be concluded that the learning success scale in higher education is reliable to measure the condition of the research subjects. The scale of the learning success ability scale can be seen in Table 1.

The data analysis technique used was the independent sample t-test to find out whether there were differences in the mastery of new student learning skills in the

Table 1. Grid of Research Instruments

No	Ability Aspect	Item Quantity
1	Time Management and Procrastination	7
2	Concentration and Memory	7
3	Study and Note-taking Aids	7
4	Strategies for dealing with exams and overcoming anxiety	9
5	Organizing and Processing Information	8
6	Increase Motivation and Organize Your Attitude	8
7	Reading and Selecting the Main Idea	8
8	Smart Ways to Write Scientific Papers	8
	Total Items	62

social sciences and science and technology clusters in terms of gender. The independent sample t-test is a parametric test used to determine whether there is a difference in the mean between two independent groups or two unpaired groups [24].

3 Result

The research data was obtained from the spread of the scale of success in studying in universities with the subject of 56 new students from the 2021 batch which was divided into social science and science and technology clumps. There are 28 Soshum and Science and Technology students each with a gender distribution of 11 males and 17 females. Before testing the hypothesis, the data obtained were tested for classical assumptions including normality and homogeneity in the gender data of Soshum and Science and Technology students at the State University of Malang.

Normality test was carried out using One Sample Kolmogrov-Smirnov, where the data were normally distributed if the significance value was greater than 0.05 ($\text{sig} > 0.05$).

Based on Table 2, it is known that the normality test on male students of the social science family got a significance value of 0.200. While the female students of the social sciences clump of 0.162. Where both of them reached $p > 0.05$.

Based on Table 3, it is known that the normality test for male students of the scientific community has a significance value of 0.200. Meanwhile, female students in the science and technology family are 0.144. Where both of them reached $p > 0.05$.

The homogeneity test was then carried out to see whether the research data had the same variance. The homogeneity test used the method based on the mean with a significance value of $p > 0.05$. The results of the homogeneity test in this study can be seen in Tables 3 and 4.

Based on the homogeneity test in the soshum group, the male and female groups obtained a value based on the mean of 0.972 with a significance of $0.333 > 0.05$. So it can be concluded that the price of variance in each data group is homogeneous (Table 5).

Table 2. Normality Test Results in Soshum Group

Variable	Gender	Sig	Information	Conclusion
Soshum Student Study Skills	Male	0,200	$p > 0,05$	Normal Distribution
	Female	0,162	$p > 0,05$	Normal Distribution

Table 3. Normality Test Results in the Scientific Group

Variable	Gender	Sig	Information	Conclusion
Scientific Student Study Skills	Male	0,200	$p > 0,05$	Normal Distribution
	Female	0,144	$p > 0,05$	Normal Distribution

Table 4. Homogeneity Test Results in the Soshum Group

Variable	F	Sig	Conclusion
Soshum Student Study Skills	0,972	0,333 > 0,05	Homogeneous variance between male and female groups

Table 5. Homogeneity Test Results in the Scientific Group

Variable	F	Sig	Kesimpulan
Scientific Student Study Skills	0,596	0,447 > 0,05	Homogeneous variance between male and female groups

Based on the homogeneity test in the soshum group, the male and female groups obtained a value based on the mean of 0.596 with a significance of $0.447 > 0.05$. So it can be concluded that the price of variance in each data group is homogeneous.

Based on the results of the classical assumption test on the learning skills data of new students entering college, it was concluded that the gender data in the social and scientific community groups were normally distributed and had homogeneous variance prices as a prerequisite for conducting the independent sample t-test. Next, a hypothesis test was conducted to find out whether there were differences in the learning skills of male and female new students in the Soshum and Science and Technology clumps in entering college.

Student Learning Skills in the Soshum Science Clump

Based on the results of the independent samples t-test, it was found that the average value of male social media students' learning skills was 219, while the average value of female students' learning skills was 217. The results of the Sig. (2-tailed) equal variances assumed of $0.685 > 0.05$, which means that there is no significant difference between

Table 6. Test Results Independent Samples T-Test in the Soshum Group

Variable	Gender	N	\bar{X}	Significance	Conclusion
Soshum Student Study Skills	Male	11	219	0,685 > 0,05	There is no significant difference
	Female	17	217		

Table 7. Test Results of Independent Samples T-Test in the Scientific Group

Variable	Gender	N	\bar{X}	Significance	Conclusion
Scientific Student Study Skills	Male	11	226	0,299 > 0,05	There is no significant difference
	Female	17	221		

the learning skills of new students of the Social and Social Sciences family in terms of gender, both male and female (Table 6).

Student Learning Skills in the Science Cluster

Based on the results of the independent samples t-test in the scientific clump group, it was found that the average value of male students' learning skills was 226, while the average value of female students' learning skills was 221. The results of the Sig. (2-tailed) equal variances assumed of $0.299 > 0.05$, which means that there is no significant difference between the learning skills of new students in the Soshum family in terms of male and female gender (Table 7).

It was concluded that there was no significant difference related to the mastery of new students' learning skills in the social sciences and science and technology clusters in terms of gender. This is reinforced by the results of the average value of learning skills for male and female new students in the social sciences and science and technology clumps which stated that there was not a very large average difference.

4 Discussion

Education is not limited to technical matters of information processing, but rather complex teaching to help learners adapt the culture to the needs of its members and the way they know the needs of the wider community [25]. Education needs to be reoriented to a combination of interdisciplinary, imagination, creativity and fun [7]. Education in higher education facilitates students in achieving educational orientation, as well as the tri dharma of higher education, namely teaching, research and community service. Each university determines the curriculum in accordance with the direction of the university and the concept of talent it pursues [26]. Students as study subjects, need study skills as a guide to complete studies effectively and productively and apply equally to men and women in the context of gender.

A scientific study conducted on 207 undergraduate students assessed the extent to which the characteristics ascribed to students based on the successful female gender (compliance aspect) and the characteristics ascribed to the successful male gender

(assertiveness, intelligence and effort) were predictors of achievement in various fields of higher education for students [27]. Women of all races have surpassed men in every title category except the first professional degree [28].

Teaching is increasingly being considered for inclusion in academic promotions at a number of universities [29]. The learning activities that occur show that education providers are competing to provide better quality education [30]. As is the case in higher education learning increasingly shaped by values and approaches oriented towards neoliberal globalization [31]. Students need to be equipped with the right learning skills before starting a new role as creator of science that applies to both women and men. The results of a study on 168 students from the University of Barcelona, who all completed measurements of test anxiety, math anxiety, and trait anxiety showed that female students reported higher levels of test anxiety than their male counterparts. who were lower than men on either the open-ended question or the multiple-choice exam [32].

Teaching in universities directs students to achieve actual learning success. Student success includes having future orientation, persistence, and executive function skills such as time management and organization [33]. Students who are said to be successful are also interpreted in various ways by the students themselves, both female and male. Their readiness to succeed eventually becomes an absolute prerequisite for students in achieving the success that universities expect as well as the demands of their gender roles. Based on scientific research conducted on 187 students enrolled in a large Midwestern university, it was shown that students most often view time management and motivation as important to be effective students [14]. Psychological mental activity also plays a role in conditioning the prerequisites for successful learning for students. One form of systematic conditioning that is possible is through counseling services.

Psychologists have studied student development from various perspectives, dealing with behavior, morals, personality types, and ways of interacting with others [34]. Counseling as a derivative of psychology science and even equated with psychology views students as developing, interacting and willing subjects according to the life they use. Students who can survive to achieve learning success are determined by psychological factors and control their own decisions in various learning achievements. Factors that contribute to student retention include: (a) feeling confident about being able to complete the tasks required to succeed in a college environment, (b) facing downwards as opposed to higher levels of college-related stress, and (c) adapts socially to avoid feelings of chronic loneliness.

Gender roles become a strategic issue and are associated with psychological symptoms of prospective students that contribute to successful learning and future careers. Gender identity directs students to act and think according to social roles and expectations of the surrounding learning environment, so that learning and career success can be achieved optimally. Research conducted on 138 Latino students showed that 18% of the variance in perceived ethnic and gender career barriers was influenced by gender, acculturation, and the college environment. Barriers experienced by students can be sourced from "unfinished business", one of which is known from how to manage self-potential. The male gender is identified as having a much higher level of self-compassion than women regarding the ability to interact with the stimuli available in the surrounding environment.

College students have higher anxiety scores than students in the first and second year of college, new students' anxiety levels are also associated with their body image, drinking habits, and academic achievement. Each student and their experience will be unique, but by developing activities that help integrate into the academic and social framework of their institution and through developing resources and support to help students cope with the demands of the course, more students will share experiences in the first year that good.

Gender studies show that men and women have different personality traits and social roles which can be reflected in their perceptions through information processing and the use of information technology around them. Gender differentiates motivation, expectations, and adjustment to college. Physiological conditions are one of the common factors in the formation of gender issues in the university environment. Research conducted on 214 students from 4 universities related to rest patterns showed that 25.4% of students, while 39.2% of female students experienced a significant impact on rest patterns, namely physical stress, psychological stress.

Constraints experienced by students in higher education ultimately contribute to learning success and contribute to determining learning orientation. Students are more extrinsically motivated and mastery-oriented than students who are more performance-oriented, because early achievement motivation plays an important role in student persistence [43]. Successful student learning in college starts from the initial preparation available in the student's immediate environment. Gender is defined as a social identity that is attached to a person to carry out social functions according to the expectations of the environment for their gender identity. Research conducted on 230 undergraduate students showed that the association between perceived authoritarian, authoritative, and permissive parenting styles for fathers and mothers and gender role identity was observed to be stronger in males than in females [18].

The results of another study on 1400 Chinese University students showed that female students had a higher prevalence of psychological distress (94.07%) than men (89.11%) in terms of the functioning of gender roles in the academic environment in universities. Psychological pressure comes from the interaction process that is formed. Research compiled on 185 Midwestern US students shows that female students use more verbal strategies than males and males use more nonverbal strategies than females.

5 Conclusions and Recommendations

The results of the study show that there is no significant difference between the learning skills of new students of the 2021 batch based on the gender of each social science and science and technology clump at the State University of Malang. The various driving factors are (1) age in the 18–19 age range; (2) come from high school students affected by Covid-19; (3) the influence of the learning environment; (4) parenting style.

Guidance service interventions to improve learning skills are needed by new students to support successful learning in higher education. The skills that need to be taught to new students are (1) time management and procrastination; (2) concentration and memory; (3) study aids and note-taking; (4) strategies for dealing with exams and overcoming anxiety; (5) organize and process information; (6) increase motivation and manage self-attitude; (7) read and select the main idea; and (8) smart way of writing scientific papers.

State University of Malang can provide trainings to improve learning skills to support adaptability in terms of academics for new students. Related training can be universal for students in the social sciences and sciences.

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References

1. M. W. Migin, M. Falahat, M. S. A. Yajid, and A. Khatibi, "Impacts of Institutional Characteristics on International Students' Choice of Private Higher Education Institutions in Malaysia.," *High. Educ. Stud.*, vol. 5, no. 1, pp. 31–42, 2015.
2. W. F. Crittenden, I. K. Biel, and W. A. Lovely III, "Embracing digitalization: Student learning and new technologies," *J. Mark. Educ.*, vol. 41, no. 1, pp. 5–14, 2019.
3. J. McDonald, A. C. M. Moskal, C. Gunn, and C. Donald, "Text analytic tools to illuminate student learning," in *Learning Analytics in the Classroom*, Routledge, 2018, pp. 165–184.
4. L. A. Shepard, "Learning progressions as tools for assessment and learning," *Appl. Meas. Educ.*, vol. 31, no. 2, pp. 165–174, 2018.
5. A. Chen, L. Li, X. Li, J. Zhang, and L. Dong, "Study on innovation capability of college students based on extenics and theory of creativity," *Procedia Comput. Sci.*, vol. 17, pp. 1194–1201, 2013.
6. W. E. Knox, P. Lindsay, and M. N. Kolb, "Higher education, college characteristics, and student experiences: Long-term effects on educational satisfactions and perceptions," *J. Higher Educ.*, vol. 63, no. 3, pp. 303–328, 1992.
7. I. Molderez and E. Fonseca, "The efficacy of real-world experiences and service learning for fostering competences for sustainable development in higher education," *J. Clean. Prod.*, vol. 172, pp. 4397–4410, 2018.
8. K. T. Kim, "The Structural Relationship among Digital Literacy, Learning Strategies, and Core Competencies among South Korean College Students.," *Educ. Sci. theory Pract.*, vol. 19, no. 2, pp. 3–21, 2019.
9. A. J. Sterling, "Student experiences in the second year: Advancing strategies for success beyond the first year of college," *Strateg. Enroll. Manag. Q.*, vol. 5, no. 4, pp. 136–149, 2018.
10. A. Toker Gökçe and E. Dikme, "Gender Roles at the Vocational High Schools in Turkey.," *Psycho-Educational Res. Rev.*, vol. 9, no. 3, pp. 56–69, 2020.
11. M. G. Cama, M. L. Jorge, and F. J. A. Peña, "Gender differences between faculty members in higher education: A literature review of selected higher education journals," *Educ. Res. Rev.*, vol. 18, pp. 58–69, 2016.
12. D. R. E. Cotton, M. Joyner, R. George, and P. A. Cotton, "Understanding the gender and ethnicity attainment gap in UK higher education," *Innov. Educ. Teach. Int.*, vol. 53, no. 5, pp. 475–486, 2016.

13. W. E. Copeland *et al.*, "Impact of COVID-19 pandemic on college student mental health and wellness," *J. Am. Acad. Child Adolesc. Psychiatry*, vol. 60, no. 1, pp. 134–141, 2021.
14. L. D. Hoops and A. Artrip, "College Student Success Course Takers' Perceptions of College Student Effectiveness.," *Learn. Assist. Rev.*, vol. 21, no. 2, pp. 55–67, 2016.
15. J. Caestine, M. Bopp, C. M. Bopp, and Z. Papalia, "College student work habits are related to physical activity and fitness," *Int. J. Exerc. Sci.*, vol. 10, no. 7, p. 1009, 2017.
16. B. Bir and M. Myrick, "Summer bridge's effects on college student success," *J. Dev. Educ.*, pp. 22–30, 2015.
17. R. Gale-Ross, A. Baird, and S. Towson, "Gender role, life satisfaction, and wellness: androgyny in a southwestern Ontario sample," *Can. J. Aging/La Rev. Can. du Vieil.*, vol. 28, no. 2, pp. 135–146, 2009.
18. Y.-C. Lin and R. E. Billingham, "Relationship between parenting styles and gender role identity in college students," *Psychol. Rep.*, vol. 114, no. 1, pp. 250–271, 2014.
19. V. Hiller and T. Baudin, "Cultural transmission and the evolution of gender roles," *Math. Soc. Sci.*, vol. 84, pp. 8–23, 2016.
20. S. B. Robbins, K. Lauver, H. Le, D. Davis, R. Langley, and A. Carlstrom, "Do psychosocial and study skill factors predict college outcomes? A meta-analysis.," *Psychol. Bull.*, vol. 130, no. 2, p. 261, 2004.
21. D. H. Schunk and B. J. Zimmerman, "Motivation an essential dimension of self-regulated learning," in *Motivation and self-regulated learning*, Routledge, 2012, pp. 13–42.
22. W. Yuliani, "Metode penelitian deskriptif kualitatif dalam perspektif bimbingan dan konseling," *Quanta*, vol. 2, no. 2, pp. 83–91, 2018.
23. C. M. Zellatifanny and B. Mudjiyanto, "Tipe penelitian deskripsi dalam ilmu komunikasi," *Diakom J. Media Dan Komun.*, vol. 1, no. 2, pp. 83–90, 2018.
24. R. Syaban, *Statistika Penelitian*. Bandung: informatika, 2021.
25. T. Swanwick, "Informal learning in postgraduate medical education: from cognitivism to 'culturism,'" *Med. Educ.*, vol. 39, no. 8, pp. 859–865, 2005.
26. S. W. Hwang and Y. A. Kwon, "An exploration of curriculum development directions through an analysis of university students' awareness of core competence," *Asia-Pacific Educ. Res.*, vol. 28, no. 3, pp. 213–227, 2019.
27. C. Verniers and D. Martinot, "Characteristics expected in fields of higher education and gender stereotypical traits related to academic success: A mirror effect," *Soc. Psychol. Educ.*, vol. 18, no. 4, pp. 719–733, 2015.
28. A. M. Garibaldi, "The expanding gender and racial gap in American higher education," *J. Negro Educ.*, vol. 83, no. 3, pp. 371–384, 2014.
29. R. Subbaye and R. Vithal, "Gender, teaching and academic promotions in higher education," *Gend. Educ.*, vol. 29, no. 7, pp. 926–951, 2017.

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