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인도네시아 음악대학 입학 실기시험과 예비 음악교사의 학업 성취 간의 관계 연구*

A Study on the Relationship Between Music College Entrance Performance Test and Academic Achievement of Prospective Music Educators in Indonesia

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Abstract The music college entrance performance test becomes an essential indicator in the examination for prospective students since it demonstrates their musical skills. The research aims to analyze the influence of music skill test results on the academic achievement of prospective music educators when selecting new students in the Music Education Study Program. This research was conducted using a mixed method. Correlation and simple regression analyses were used to analyze music skill test results and learning outcome data obtained from grade documents. Meanwhile, qualitative analysis was conducted to analyze data from questionnaires. The research results show that: (1) music skill test results positively affect academic achievement in the music practice, music theory, and vocal practice course groups; (2) the music skill test material is relevant and helps prospective music educators learn in the music theory, music practice, and musical creativity course groups; (3) the types of music skills practiced during the selection process are not always used as a reference in determining the type of music skills chosen to be studied. These results imply that the effectiveness of new student selection can be improved if the skills test is more tailored to the direction of learning that will be undertaken.

Key words: music education, academic achievement, skills tests, music practice, new student admissions

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초록 음악대학 입학 실기시험은 지원자의 음악적 역량을 입증하는 중요한 지표가 된다. 본 연구는 음악교육과정에서 신입생을 선발할 때 실시하는 음악 기능 검사의 결과가 예비 음악교사의 학업 성취에 미치는 영향을 분석하는 것을 목적으로 한다. 연구는 혼합 방법(mixed methods)을 활용하여 수행되었으며, 음악 기능 검사 결과와 성적 기록으로부터 수집한 학업 성취 데이터를 분석하기 위해 상관분석과 단순 회귀분석을 사용하였다. 또한 설문지 응답을 분석하기 위해 질적 분석을 병행하였다. 연구 결과는 다음과 같다. 첫째, 음악 실기, 음악 이론, 보컬 실기 교과목 그룹에서 음악 기능 검사 결과는 학업 성취에 긍정적인 영향을 미치는 것으로 나타났다. 둘째, 음악 기능 테스트 자료는 음악 이론, 음악 실기, 음악 창의성 관련 교과목에서 예비 음악교사의 학습에 유의미하고 관련성 있는 자료로 기능한다. 셋째, 입시 과정에서 평가한 음악 기능 유형이 이후 실제 수업에서 학습하게 되는 음악 기능 유형과 반드시 일치하지는 않으며, 항상 주요 참고자료로 활용되는 것도 아니다. 이러한 결과는 향후 음악 기능 검사의 내용이 이후 학습 내용과 보다 긴밀히 연계되어 설계된다면, 신입생 선발의 효율성과 교육과정의 적합성을 동시에 제고할 수 있음을 시사한다.

주제어: 음악 교육, 학업 성취, 기술 테스트, 음악 연습, 신입생 입학

Ⅰ. Introduction

Higher education in Indonesia as one of the educational implementing institutions based on the Regulation of the Minister of Education, Culture, Research, and Technology number 53 of 2023, Article 6 Paragraph 2 is tasked with producing graduates with minimum competency standards, namely, students who are ready to become members of society who have faith, piety, noble character, character by the values of Pancasila, are able and independent to apply, develop, discover science and technology that benefits society, and actively develop its potential. Therefore, the recruitment process for prospective students is carried out through a selection process using various pathways and competency tests. The goal is to obtain prospective students with potential, interests, and special skills per the study program's characteristics. These three things are essential in various studies because they support academic achievement and minimize student dropouts (Iannelli et al., 2024; Ofem et al., 2024; Shamsaldeen et al., 2024).

Until now, the process of accepting new students of State Universities in Indonesia has been carried out through three paths that are carried out sequentially. In the initial stage, the admission of new students nationally is carried out through the National Selection Based on Achievement route, then in the next stage, it is carried out through the National Selection Based on Tests. The national committee centrally carries out the two pathways to select new student admissions of State Universities throughout Indonesia. Meanwhile, in the third stage, student admissions are carried out through an independent route organized by each state university in Indonesia (Karouw et al., 2014). The importance of studying the issue of new student admissions in Indonesia from

various perspectives is relevant to several studies conducted. Studies related to efforts to optimize the admission of new students according to the needs and characteristics of the institution, both regarding the admission mechanism, competence, and substance of test materials, strategies, selection methods, development, and use of technology have received attention from previous researchers (Assiri et al., 2024; Haavisto & Talman, 2022; Hidayat & Pamuji, 2023; Jannah et al., 2021; Koenig et al., 2013; McCallum et al., 2006; Putri et al,. 2019; Soemantri et al., 2022).

The test material for new student admissions in music study programs, both educational and non-educational, is conducted using two selection materials: the Academic Potential Test and Music Skill Test, each carrying an equal weight. The score data used consists of three types, namely academic achievement documents obtained during high school or vocational studies, computer-based written test results, and hands-on practice or a portfolio document of the music skill test. The similarity in the weight of the two test materials in the student selection process shows that the importance of the potential musical talent of prospective students who choose the music education study program is considered the same as other academic abilities. This is relevant to the opinion. Shouldice (2018) states that the results of the music skill test in the applied skill test can be used to determine the learning readiness of new students when studying in the Music Education Program.

The accuracy of the selection strategy in the admission of new students in Indonesia and its success have been studied by several researchers. Qudratullah (2014) finds that admitting students from external pathways nationally improves academic achievement compared to students accepted through internal pathways organized by universities. Meanwhile, based on the school's origin, students from public and vocational schools have better learning outcomes when compared to students from madrasah schools. Confirming these findings, research by Asri and Nur (2014) conducted at one of the Faculty of Medicine, State University in Indonesia, finds that the academic achievement of students accepted through the interest and talent tracing pathway have higher educational achievement when compared to academic achievement with the national selection for state universities and the local written examination for higher education pathways.

Based on these findings, the problem of music skill tests that have been applied in music education study programs needs to be studied. In addition to obtaining information about the reliability of the selection materials used, it can also be used to obtain information about the contribution and support of music skill test materials to student readiness to study in the Music Arts Education Study Program. In this regard, this research aims to analyze the influence of music skill test results during the selection of new students on the academic achievement of

prospective music educators in the Music Education Study Program. Two important questions will be answered in this study, namely: (1) do the results of music skill tests during the selection of new students influence the academic achievement of prospective music educators in the Music Education Study Program? and (2) how does the music skill test material contribute during the selection of new students to the learning readiness of prospective educators in attending lectures in the Music Education Study Program?

Ⅱ. Literature Review

1. Factors affecting successful music learning

Three factors affect learning outcomes: internal factors, external factors, and the student's approach to learning. In internal factors, analysis is carried out on two sub-factors, physiological and psychological factors, which affect learning outcomes. Meanwhile, in external factors, the analysis is carried out on two sub-factors: the social environment and the non-social environment. As for the learning approach, factors can be understood as any method or strategy used by students to support the effectiveness and efficiency of the learning process (Luh et al., 2021). This research specifically examines the influence of the music skill test results on students' academic achievement in the Music Education Study Program. Therefore, the focus of the study is only related to one of the internal factors of prospective students, namely the problem of learning readiness, which is identified through the results of the music skill test held at the time of the selection of new students. In the context of internal factors, several studies have revealed the importance of learning readiness, self-efficacy, motivation, discipline, confidence, experience, and economic factors as supporting academic achievement (Balasopoulou et al., 2017; Cao et al., 2024; Lidia & Hasibuan, 2019; Naim & Fandyansari, 2023; Sulasmi & Akrim, 2020).

Readiness to learn as a form of encouragement from within a person is a condition that, as a whole, can prepare students to respond to the situation that will be faced. Regarding internal factors, Aprila and Marna (2024) involving a sample of 83 people reveal that four factors are hierarchically formed in the context of academic achievement, including: learning willingness which is the most dominant factor influencing learning readiness with an eigenvalue of 5.105 and a variance value of 22.195, confidence is the second factor that affects learning readiness with an eigenvalue of 2.024 and a variance value of 8.799, self-awareness is the third factor

that affects learning readiness with an eigenvalue of 1.312 and a variance value of 5.703, and learning discipline is the fourth factor that affects learning readiness with an eigenvalue of 1.044 and a variance value of 4.537 (Aprila & Marna, 2024). Complementing these findings, Pujani & Priyanka (2021) find that a person's learning motivation, interest in learning, and talent are factors that are considered important in influencing learning outcomes.

In the context of music learning, the results of the music skill test for prospective educators at the time of selecting new students in Indonesia are considered one of the important factors in supporting academic achievement. Relevant to the results of existing research, the results of the music skill test of prospective students can be used as an indication of their interest, talent, and experience in music to support their readiness to learn when taking all existing music skills materials. Regarding interest, research by Vallero et al. (2019) reveals that intrinsic motivation in students' desire to learn is important in supporting academic achievement during music learning. The choice of prospective students for the Music Education Study Program, according to Babacan et al. (2022), is considered a form of positive attitude towards music. The existing views will impact students' motivation to always try harder in learning, improving their academic achievements.

The talent factor and musical experience possessed by prospective music students are important variables that can foster psychological aspects that support music learning. This is explained in Martin's (2012) research, which reveal that students with high self-efficacy are more likely to succeed in their learning efforts. In the learning process, students who are confident because they have musical skills and musical experience are more likely to be actively involved, so they have the potential to improve their learning outcomes. Reinforcing these findings, Nikolić and Kodela (2016) find that students' musical talents are important in fostering musical creativity at various ages and educational contexts.

2. The importance of musical skills for prospective music educators

Regarding the music teacher profession, the results of the study show that the factors that affect students' interest in choosing music education study programs in order are: self-motivation that has an effect of 23.1%, study talent and personal ability that are influential by 12.3%, study program that has an effect of 12.2%, the community's environmental that is influential by 11.6%, prospects and job opportunities that have an effect of 11.5%, opportunity accepted that has an effect of 9.1%, school support that is influential by 7.4%, and family support that has an effect

of 1.8%. This data shows that self-motivation, talent, and personal ability remain the most influential factors. Meanwhile, family support is the lowest driving factor (Anggraeni, 2016). Referring to the research results, it is very appropriate if, during the implementation of the selection of new students in the music education study program, the components of motivation, interests, and musical talents are determined in addition to other components of academic competence.

Psychological factors in the form of musical ability for prospective educators are essential. This ability is necessary to help optimally develop its students' potential in the future. The musical talent possessed by students, if supported by the proper management of the learning environment through directed and regular exercises with the guidance of professional educators, will develop optimally to support their academic achievement (Müllensiefen et al., 2015; Sumaryanto & Utomo, 2015). This aligns with Elpus (2015) who explicitly states that prospective educators with good musical ability during the learning process will be better able to inspire and support students during the learning process. This ability is not only needed for the sake of teaching, but can also be used to build positive relationships with students.

The love and credibility of prospective music educators for teaching is manifested in their ability to manage enjoyable music learning. Drives can only be done by educators with musical ability. This professional identity will be meaningful in developing the competence of prospective educators in producing positive experiences for students when studying (preservice) in the music education study program or after becoming a teacher (in-service). Shahin's (2011) research, in the context of learning planning, finds a significant relationship between musical ability and the success of initiating pedagogic and innovative music education. Educators who are proficient in the field of music tend to be able to develop a relevant and engaging learning curriculum to increase students' interest and involvement in music lessons.

The competency standards required for educators in Indonesia, including music educators, include personality competence, social competence, pedagogic competence, and professional competence. The four competencies are holistic and integrative in teacher performance, so that as a whole the teacher must be able to recognize student in dept, master the field of study which includes disciplines (disciplinary content) and teaching materials in the school curriculum (pedagogical content), organize learning which includes planning, implementing learning, and assessing learning processen and outcomes, as well as following-up for learning improvement and enrichment, and sustainably develop personality and professionalism (Asmani, 2009). Regarding these competencies, the analysis carried out by this research focuses on the problem of the academic achievement of music study program students based on the group of courses

related to pedagogic and professional competencies. Developing pedagogic competencies for prospective educators in the curriculum of music education study programs in Indonesia is achieved through a group of educational courses. Meanwhile, the development of professional competence in music is carried out through music theory courses, music knowledge insights, vocal practices, music practice, elective music practices, and music creativity courses. Due to differences in potential, cultural characteristics, and the institution's location, vision, mission, and goals, the curriculum in the music education study program in Indonesia is different. Especially when viewed from the aspect of the type of course, the number of credits, and the characteristics of existing music culture.

3. The relationship between music practice tests and prospective music teacher learning readiness

The determination of music practice in the selection of prospective music educators as an effort to maintain the standard of ability expected by the organizing institution is also a vital instrument to determine the learning readiness of prospective music educators and to predict their ability to face academic challenges during the studies they will follow (Gold et al., 2019). In addition, the music learning experience of prospective music educators obtained in the selection process provides data on the structure of knowledge and musical skills that can also be used to evaluate the development of learning strategies and their curriculum structure.

To predict how much influence the music skill test has on the academic ability of prospective music educators in various courses, the regression analysis used in this study provides information about the existing patterns of academic achievement. This is relevant to the study by Gfeller & Mallalieu (2023), which states that studies like this can practically be used as an initial evaluation of the learning readiness and ability of prospective music educators in adapting to the existing curriculum in the music education study program. Meanwhile, the qualitative analysis provides information on how the music practice test affects motivation, their approach to the music learning experience, their confidence, and their commitment to their studies (Valero et al., 2019).

The relationship between the results of the music practice test and the learning readiness of prospective music educators in the Music Education Study Program plays an important role in developing more effective educational paths. Therefore, this research will guide decision-makers in creating and implementing a better assessment system to improve academic success in music education study programs (Shouldice, 2018; Yoo, 2020).

Ⅲ. Method

1. Research subjects

The subjects of this research were determined purposively, namely students of the Music Education Study Program, Faculty of Languages and Arts, Universitas Negeri Semarang, in the classes of 2016 and 2020. Students of the 2016 class represent a research sample whose music skill test is carried out directly (face-to-face), while students of the 2020 class represent a research sample representing students during the covid pandemic whose selection test process is carried out using a portfolio in the form of video recordings and self-descriptions of their motivations, experiences, and achievements in the field of music. The total number from the two batches is 52 people, with details of 32 students of the 2016 class and 20 students of the 2020 class. Students who are selected as research subjects are students who have academically completed all courses, except for thesis writing and music skill test documents that can be accessed completely by researchers.

2. Measurement tools

Data collection in this study was carried out using value documents and questionnaires. The instrument for collecting variable data on the results of the music skill test at the time of new student selection (X) is in the form of a score document from the results of the music skill test whose assessment is carried out by a team of examiners from the Music Education Study Program, Faculty of Languages and Arts, Universitas Negeri Semarang. The total score data from 32 students of the class of 2016 and 20 students of the class of 2020 were combined into one unit of analysis. The instrument for collecting variable data on learning outcomes of students of the music study program (Y), in the form of a document of learning outcomes from all test courses. Meanwhile, the Google form questionnaire used in this study is used as an additional data collection instrument containing closed-ended questions, short answers, and open-ended questions. The list of questions to prospective educators contains information about: (1) identity; (2) the origin of the secondary school (public, vocational, or music school); (3) the mode of selection followed (direct practice or portfolio); (4) the type of music practice displayed when taking the new student selection skill test; (5) the suitability of the chosen musical practice and its reasons for the elective instrument courses followed; and (6) the contribution and relevance

of the music skill test material in supporting the courses followed during the study.

3. Analysis methods

The analysis of data on the success of student learning outcomes of the music education study program based on the results of the music skill test in the selection of new student admissions in this study was carried out using correlation test analysis and influence test analysis using simple regression analysis. In the influence test analysis, the results of the music skill test were positioned as the independent variable (X). In contrast, the variables of learning outcomes of prospective educators in the music education study program were positioned as the dependent variables (Y).

The data analyzed in the variable results of the music skill test (X) is the average of the combined score of the music skill test (rhythmic and melodic), the singing skill test, the singing skill test with musical accompaniment or the skill of playing a musical instrument, and the self-description which includes the motivation score, and the score of experience and achievement in music. The data analyzed on the variables of learning outcomes of prospective educators in the Music Education Study Program (Y) is the average score of all groups of courses that students have taken during their studies. Meanwhile, the analysis of the learning outcomes of prospective educators in the seven groups of courses studied, is the average data of learning outcome scores in the course groups of music theory, music knowledge insight, education, vocal practice, music practice, elective music practice, and music creativity; each of which is then sequentially labeled as a variable of Y1, Y2, Y3, Y4, Y5, Y6, and Y7. The seven courses are relevant to developing pedagogic and professional competencies for prospective music educators based on their characteristics. In detail, the research variables, variable descriptions, and course names based on the Music Education Study Program curriculum, Faculty of Languages and Arts, Universitas Negeri Semarang, which are applied to students of the 2016 and 2020 classes, are explained in Table 1.

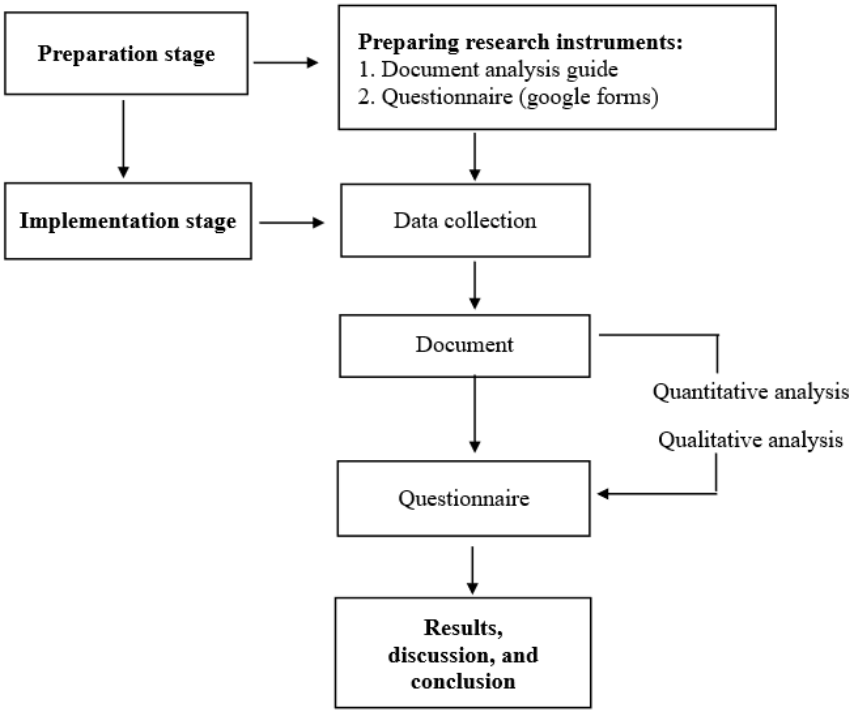
<Table 1> Research variables, variable descriptions, and names of pedagogical and professional competence courses based on the 2016 and 2020 curricula

No.	Research variable and the variable description	The course title
1	The music skill test results (X) The final results of the music skill test scores are the accumulation of musicality tests, singing national songs, singing with musical accompaniment, or playing musical instruments, and descriptions of motivation, experience, and achievements in the field of music.	None
2	Music education students' learning outcomes (Y) The seven existing courses obtained the average value of students' learning outcomes.	A combination of seven course groups was studied.
3	Learning outcomes of the music theory course group (Y1) A course group that studies the characteristics of sound sources, basic elements of music (melody, rhythm, harmony, timbre) in Javanese diatonic and pentatonic scales, musical notation, and song structure.	(1) Music theory; (2) Acoustic and organology; (3) Solfeggio; (4) Harmony; (5) Knowledge of gamelan; (6) Music analysis and criticism
4	Learning outcomes of the music knowledge course group (Y2) A course group that studies knowledge of music history, knowledge of art (visual and dance), knowledge of instrumentation (wind and string instruments), and knowledge of sciences related to the field of music (interdisciplinary).	(1) History of art; (2) Art knowledge; (3) Aesthetics; (4) Wind and string instruments; (5) Psychology of music; (6) Sociology of art; (7) Anthropology of art
5	Learning outcomes of the pedagogical course group (Y3) A course group that examines knowledge and skills related to educational science, learning components, learning design, school management, learning management, and teaching practice.	(1) Introduction to educational science; (2) Educational psychology; (3) Curriculum and material development; (4) School management; (5) Guidance and counseling; (6) Teaching planning; (7) Music teaching and learning strategies; (8) Teaching evaluation; (9) Micro teaching; (10) School field practices.
6	Learning outcomes of the vocal practice course group (Y4) A course group that examines the knowledge and practice of singing javanese *(macapat)*, national, classical, and popular songs individually or in choir form.	(1) Song; (2) Vocal 1 and vocal 2; (3) Choir
7	Learning outcomes of the music practice course group (Y5) A course group that examines knowledge and practice of playing traditional and modern musical instruments both individually and in groups, as well as knowledge and practice of conducting.	(1) Javanese karawitan; (2) Balinese karawitan; (3) Central javanese coastal music; (4) Central javanese folk music; (5) Percussion class; (6) Piano; (7) Guitar; (8) Band; (9) Ensemble; (10) Marching band; (11) Keroncong; (12) Conducting

<Table 1> Continued

No.	Research variable and the variable description	The course title
8	Learning outcomes of the elective music practice course group (Y6) A course group that examines the knowledge and practice of singing or playing one type of musical instrument as an in-depth study of previously taken music practice courses.	Elective music practice (wind instruments, piano, guitar, violin, and vocals).
9	Learning outcomes of the music creativity course group (Y7) A course group that utilizes various music technologies to examine the knowledge and practice of creating music for learning and other purposes.	(1) Educational music; (2) Composition; (3) Arrangement; (4) Music creativity; (5) Music technology

The data obtained through the questionnaire in this study are described and analyzed qualitatively to provide an interpretation and discussion of the results of the quantitative analysis that has been carried out. So that the results are expected to complement each other (Creswell & Clark, 2017). Based on this description, the stages of research that have been carried out are described in detail in Figure 1.



[Figure 1] Stages of research preparation and implementation

Ⅳ. Results

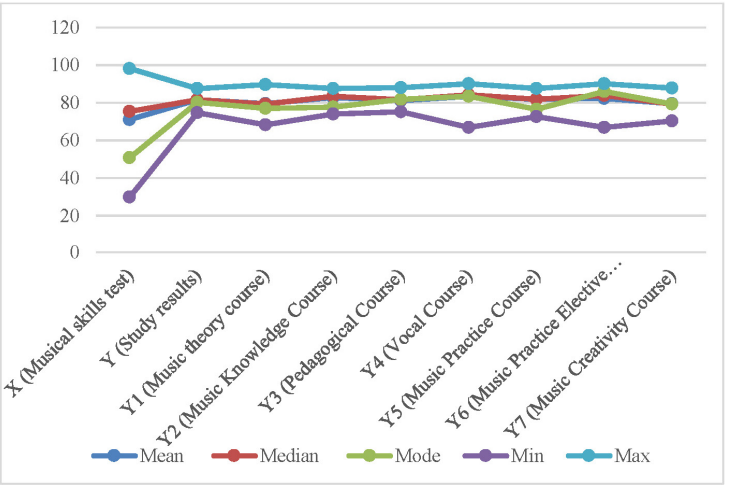
1. Data description of music skill test results and learning outcomes of prospective educators

Based on the grouping of courses that are used as the object of this study, the following is a description of the data from the analysis of music skill test scores and the learning outcomes of prospective educators in the Music Education Study Program, Faculty of Languages and Arts, Universitas Negeri Semarang. Detailed value distribution in average, median, mode, minimum, and maximum values can be seen in Table 2.

<Table 2> Data description of the value of the music skills test results variable, overall learning outcomes, learning outcomes of each course group of music education study program students

No.	Variable	N	Mean	Median	Mode	Minimum	Maximum
1.	The test results of music skill test	52	71.10	75.40	50.80	29.90	98.20
2.	The study results of the music education study program students	52	81.5	81.60	80.20	74.70	87.5
3.	The study results of the music theory course group	52	79.60	79.40	77.00	68.30	89.70
4.	The study results of the music knowledge course group	52	82.70	83.40	77.70	74.00	87.60
5.	The study results of the pedagogical course group	52	81.10	81.70	81.80	75.20	88.00
6.	The study results of the vocal practice course group	52	83.40	84.20	83.50	66.80	90.00
7.	The study results of the music practice course group	52	81.80	81.90	76.50	72.70	87.60
8.	The study results of the elective music practice course group	52	82.30	83.80	86.00	67.00	90.00
9.	The study results of the music creativity course group	52	79.6	79.40	79.20	70.30	87.70

The distribution of data in Table 2 is presented in the form of a graph in Figure 2.



[Figure 2] Data description of the value of the music skills test results variable (X), overall learning outcomes (Y), learning outcomes of each course group (Y1-Y7) of music education study program students

2. Academic achievement of prospective music educators based on the results of the music skill test during the selection of new student admission

The academic achievement of prospective educators in the Music Study Program described in this section is the result of a quantitative analysis that has been carried out. The correlation test analysis was carried out to determine the correlation between the variables of the results of the music skill test (X) and the eight variables of the learning outcomes of prospective music educators in the music education study program. Meanwhile, the influence test was carried out to determine the influence of the variables of the results of the music skill test (X) on eight other variables, namely the variables of the overall learning outcomes of students of the Music Education Study Program (Y) and the variables of learning outcomes in the seven course groups studied (Y1, Y2, Y3, Y4, Y5, Y6, and Y7).

1) Results of correlation analysis between music skill test results and learning outcomes of prospective music educators

Based on the results of the correlation analysis using a degree of freedom of .05, it has shown

that: (1) the correlation in the strong category with an R-value of .51-.75 occurred between the variable of the results of the music skill test (X) and the variable of the learning outcomes of the music practice course group (Y5); (2) the correlation in the category of moderate with an R-value of .26 − .50 occurred between the variable of the results of the music skill test (X) and the overall learning outcomes of prospective music educators (Y), the music theory course group (Y1), and the vocal practice course group (Y4). Meanwhile, between the variable of the results of the music skill test (X) and the variable of the music knowledge insight course group (Y2), the group of the education course group (Y3), the elective music practice course group (Y6), and the music creativity course group (Y7), there is no significant correlation because the p-value > .05. A detailed summary of the correlation between these variables can be seen in Table 3.

<Table 3> The level of correlation between the variables of music skill test results (X), learning outcomes of music theory (Y1), music knowledge insight (Y2), education (Y3), vocal practice (Y4), music practice (Y5), elective music practice (Y6), and music creativity (Y7)

Variable	Y mean	Y1	Y2	Y3	Y4	Y5	Y6	Y7
X	.391**	.447**	.129	.268	.422**	.564**	-.01	.271
Sig. (2-tailed)	.004	.001	.361	.055	.002	.000	.944	.052
Correlation level	Moderate	Moderate	No correlation	No correlation	Moderate	Strong	No correlation	No correlation

*$p<.05$
**$p<.01$

2) Results of analysis of the influence of music skill test on the learning outcomes of prospective music educators

There are two results of the analysis described in this section, namely: (1) the results of the analysis of the influence of the music skill test on the overall learning outcomes (Y) of the prospective educators in the music education study program; and (2) the results of the analysis of the influence of the music skill test on the learning outcomes of the prospective music educators in the course groups studied (Y1, Y2, Y3, Y4, Y5, Y6, and Y7). Based on the results of the analysis of the data on the results of the music skill test during the selection of new students and the learning outcomes of prospective educators in the music education study program in the form of the average score of the learning outcomes of the seven course groups studied,

it can be explained that the results of the music skill test (X) have a significant effect on the music learning outcomes of prospective educators in the music education study program (Y). The effect of the music skill test (X) results on the learning outcomes of music prospective educators (Y) is 15.3%. The summary of the results of the regression analysis carried out is explained in Table 4.

<Table 4> Summary of the results of simple regression analysis

R	R square	Variabel	Unstandardized coefficients		Standardized coefficients	t	Sig.
			B	Std. error	Beta	B	Std. error
.391(a)	.153	(Constant)	77.176	1.486		51.940	.000
		Music skill test	.061	.020	.391	3.002	.004

a. Predictors: (Constant), music skill test
b. Dependent variable: Music learning outcomes

Based on this data, it can be explained that, in the variable of the music skill test, a significance value of .004 (less than .05) was obtained, so that at α= .05 it can be interpreted that the results of the music skill test have a positive and significant effect on the learning outcomes of prospective music educators in the music education study program. The simple regression equation is used to indicate that the learning outcomes of prospective music educators are predicted by the music skill test.

Based on this equation, it can be interpreted that a positive constant value of 77.176 shows a positive influence on the learning outcomes of prospective music educators (dependent variables). So, when the score of the music skill test increases by one point, there will be an increase in the learning outcomes of prospective educators in the music study program by .061. The magnitude of the influence of the music skill test, shown by the R-square value of .153, shows the understanding that the effect of the music skill test on the learning outcomes of students of the music arts education study program is 15.3%. Furthermore, 84.7% of the learning outcomes of prospective educators in the music education study program are influenced by other factors outside the regression model. The analysis results of the music skill test variable (X) as an independent variable with seven course groups studied (Y1, Y2, Y3, Y4, Y5, Y6, and Y7) as dependent variables are summarized in Table 5.

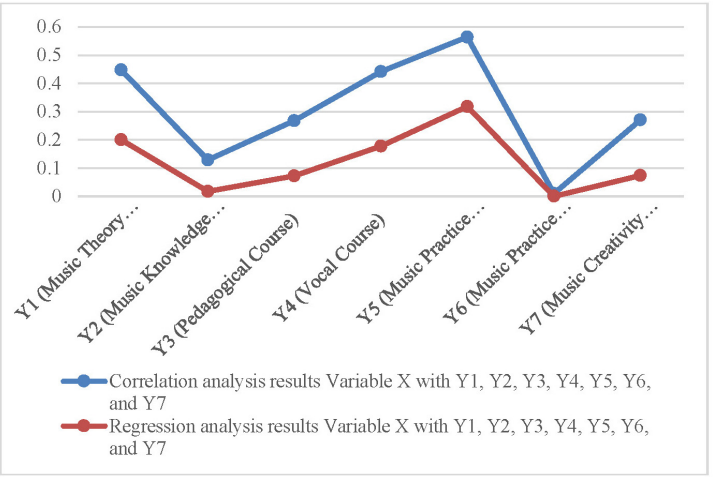
<Table 5> The effect of music skills tests on seven course groups in the music education study program

No.	Independent variable	Dependent variable	R	R square	t	Sig.	Results
1.	The test results of music skill test (X)	The study results of the music practice course group (Y5)	.564**	.318	4.832	.00	Influence percentage is 32%
2.	The test results of music skill test (X)	The study results of the music theory course group (Y1)	.447**	.200	3.536	.001	Influence percentage is 20%
3.	The test results of music skill test (X)	The study results of the vocal course group (Y4)	.422**	.178	3.29	.002	Influence percentage is 18 %
4.	The test results of music skill test (X)	The study results of the music creativity course group (Y7)	.271	.074	1.993	.052	No influence
5.	The test results of music skill test (X)	The study results of the education course group (Y3)	.268	.072	.10968	.055	No influence
6.	The test results of music skill test (X)	The study results of the music knowledge course group (Y2)	.129	.017	.922	.361	No influence
7.	The test results of music skill test (X)	The group of the elective music practice course group (Y6)	.010	.000	-.071	.944	No influence

*p<.05
**p<.01

Based on the data in Table 5, it can be concluded that the music skill test variable at α .05 only has a significant effect on the learning outcomes of the music practice course group (Y5), the music theory course group (Y1), and the vocal practice course group (Y4). Meanwhile, for the learning outcome variables, the music knowledge insight course group (Y2), the education course group (Y3), the elective music practice course group (Y6), and the music creativity course group (Y7) have no effect. The contribution of the results of the music skill test (X) to the learning outcomes of music practice is 32%, to music theory (Y1) is 20%, and to vocal practice (Y4) is 18%.

The analysis of the correlation test and regression between the variables of the results of the music skill test on the learning outcomes of the seven course group in the music education study program can be seen simultaneously in Figure 3.



[Figure 3] Results of the correlation and regression test analysis between the results of the music skill test and the seven groups of courses in the music education study program

3. The contribution of music skill test materials to the learning readiness of prospective educators in attending lectures in the music education study program

The questionnaire submitted to the students shows that most prospective students of the Music Education Study Program, as one of the institutions that prepare prospective music educators, come from public high schools. In the following order, it comes from non-music vocational schools, followed by music vocational schools. During the selection of new students, when presenting their musical skills in person or video recordings (portfolios), most of them chose to play musical instruments such as guitar, piano/keyboard, violin, and cello. The next type of musical practice is singing while playing instruments such as guitar, piano/keyboard, cak (keroncong musical instrument), and harmonica. The next order with a smaller number is singing. The choice of the type of music practice carried out during the selection of new students is explained in Table 6.

<Table 6> Comparison of types of school origin, choice of types of music practices, and musical instruments played during the selection of new students (N=55)

School origin	Number of respondents	Information
Public high school	39	Music learning, followed in the curriculum, is only one of the materials in the cultural art subject.
Non-music vocational high school	9	The music learning followed is only one of the materials in the cultural art subject.
High school of music	7	A vocational high school that prepares its students to have strong musical skills and be ready to work in the music industry or related fields.
Choice of music practice types		Information
Playing a musical instrument	24	Nine people play guitar, ten play piano/keyboard, four play violin, and one plays cello.
Singing while playing a musical instrument	18	Nine people play guitar, seven play piano/keyboard, one plays cak, and one plays harmonica.
Singing to the accompaniment of music	13	Using the accompaniment *minus one*

The music skill test material contributes to selecting new student admissions for prospective educators. It follows the competency needs in the Music Education Study Program learning process. In the music theory course group, the music skill test material during lectures supported the solfeggio (29 respondents), music theory (24 respondents), harmony (14 respondents), and music analysis and criticism (3 respondents). Meanwhile, 34 respondents stated that they supported the group lecture process of music practice courses. Seven respondents stated that the music skill test material, when selecting new students, was also supported by prospective educators when participating in the music creativity course group, namely in music education, composition, music creativity, and music technology. As expressed by one of the respondents, the relationship between the music skill test material and the music theory and music practice course groups.

> … the test helped me understand the basics of reading notation, recognize intervals and scales, and the ability to hear and imitate pitches, all of which are important skills in lectures. In addition, the basic skills measured in the test are also useful when taking music ensemble courses because they support music playing skills together.

While studying in the Music Study Program, prospective music teacher students get various

music practice courses. Several music practice courses in the Music Education Study Program, Faculty of Languages and Arts, Universitas Negeri Semarang, Indonesia in the form of courses: Tembang, Vocal 1 and Vocal 2, Choir, Javanese Karawitan, Balinese Karawitan, Central Java Coastal Music, Central Java Folk Music, Percussion Class, Piano, Guitar, Band, Ensembles, Marching Band, Keroncong, and Conducting. In addition to the music practice course, one elective music practice course is held for two consecutive semesters. This course aims to provide musical practice specialization skills to prospective educators. The types of musical skill choices carried out in this course, based on the curriculum that applies to date, are seven types, namely vocal, piano, guitar, woodwind (flute and saxophone), brass wind (trumpet and trombone), string instruments (violin and cello), and percussion (drums).

The choice of the type of music practice based on the questionnaire shows that, out of 55 prospective educators, 37 people chose the type of music practice according to their initial ability during the selection of new students. The other 18 people chose a different type of music practice. There are several reasons for this choice. Educators who choose the same type of music practice give reasons such as adjusting their abilities so that they can follow lectures optimally, deepening knowledge, techniques, and improving the skills of music practice they have mastered. This is expressed by one of the respondents, who said the following.

> I chose the instrument of choice for the piano major because I have loved the piano for a long time. In my opinion, the piano is an interesting instrument because it can be played solo or as an accompaniment to songs..... I want to delve deeper into the piano instrument so that my playing skills can develop, so that later I can use it for teaching purposes or performing on various occasions.

For prospective educators who choose a type of music practice that is different from the music practice carried out during the selection of new students, several reasons are conveyed such as: (1) intending to increase the competence of music practice required in music learning; (2) intending to learn other types of musical instruments and their challenges; (3) seeing the existence of job opportunities for the music skills they chose; (4) there is no choice of the type of music practice that is by the musical skills that they have mastered; (5) the learning model of music practice they chose was considered very interesting; and (6) the chosen music practice is considered easy in the lecture process. Related to this reason, one of the respondents who played a cello during the selection but at the time of taking the elective practical course, he/she chose to learn the piano, stated the following.

> I chose a piano instrument, because I will work in the field of education, so I must be able to play the instrument, especially as an accompanying tool that is most often used in the learning process

On the other hand, one of the respondents played a piano during the selection, but at the time of the lecture, he/she chose to study a wind instrument, as stated below.

> At first I focused on learning the piano instrument..., but after I entered college.... I switched my concentration to learning woodwind instruments because I wanted to add new knowledge I had not gained.

Based on some of this evidence, it shows that the initial skills of prospective educators in music practice are an indispensable basis in supporting academic achievement. Although at a later stage, for various reasons, they do not use it as a reference in pursuing further the type of musical instrument learned during lectures.

Ⅴ. Discussion & Conclusion

Evidence of the importance of the music skill test as one of the components in the selection of new students in the music education study program shows that the variable of the music skill test is only correlated with the learning outcomes of the music practice, music theory, vocal practice, and music creativity course groups. Meanwhile, based on the results of the influence test analysis that has been carried out, it shows that the results of the music skill test only affect the learning outcomes of the music practice, music theory, and vocal practice course groups. On the other four groups of courses, namely music knowledge insights, education, elective music practice, and music creativity, there was no effect.

The effect of the results of the music skill test on the learning outcomes of the music practice and vocal practice course groups have proven that the music skill test material which includes basic musical skills (imitating melodic and rhythmic sentences), singing skills, and/or playing musical instruments of the prospective music educators applied in the selection of new students is by the recruitment objectives carried out. The test materials applied have been able to become an instrument to obtain information about the potential, musical skills, and learning readiness

of prospective music educators who are accepted into the Music Education Study program (Gold et al., 2019; Iannelli et al., 2024; Ofem et al., 2024; Shamsaldeen et al., 2024).

The results of the influence of the music skill test on the learning outcomes of the music theory course group in this study provide information that, in the context of music learning, several theoretical competencies are significantly related to the competence of music practice. In this research, the evidence was shown by the research respondents who revealed that solfeggio, music theory, harmony, and music analysis and criticism are considered as courses that, in the lecture process, are supported by test materials during the selection of prospective music educators. The slice of theoretical academic studies with the competence of music practice is relevant to the findings of Sanders (2012), who stated that there is a significant relationship between music training and logical abilities that represent academic ability. Reinforcing these findings, it is also revealed that musicality ability in the form of beat perception, melody memory tests, and voice similarity tests contained in music skill test materials are related to the level of intelligence and academic ability of prospective music educators (Müllensiefen et al., 2015).

The contribution of the music skill test results to the learning outcomes of students of the music arts education program, which is only 15.3%, shows that the other 84.7% is influenced by other variables that are specifically not studied in this study. Another variable in the context of the selection material for the admission of prospective music educators in the music arts education study program is the academic ability factor, which is carried out through a portfolio of academic achievements or academic potential tests during the selection process. Meanwhile, other factors that take place during the student's studies in the music education program can be internal and external factors. Internal matters, based on existing research results, can be related to motivation, adaptability, readiness to learn, self-efficacy, discipline, confidence, and others. Meanwhile, external factors that support academic achievement can be in the form of the availability of learning facilities, the learning environment, the image of the institution, the selection of learning models, learning methods, and the forms of assignments applied by lecturers in various existing courses (Bagaskara & Handayaningrum, 2023; Hartono & Puspitaningrum, 2019; Mudaim & Wibowo, 2018; Prasetiya, 2019; Váradi et al., 2024).

Considering the material for the new student selection exam in the Music Education Study Program using assessment instruments that can measure academic competence and musical skills for prospective music educators remains a policy that needs to be implemented. The goal is for music education institutions to get students who have competencies following the scientific characteristics of the study program. This policy is relevant to several research results that reveal

that although academic grades greatly determine student academic achievement, a holistic approach in evaluating prospective students' abilities and potential is necessary. The form can involve interviews, portfolios, or specific competency tests according to the characteristics of the field that are considered to provide a more complete picture of the abilities and interests of prospective students (Manzano, 2021; Nugraha, 2024; Ognjanovic & Dawson, 2016).

There is an interesting finding that the influence of the results of the music skill test (X) on the music practice course group (Y5) does not necessarily occur on the learning outcomes of the elective music practice course group (Y6). The data shows that not all students, when taking the elective music practice course, choose the type of elective course that suits their initial abilities. Prospective educators who choose the type of musical skills they have mastered convey reasons for adding and deepening the insight and musical skills they have mastered. Meanwhile, prospective educators who choose the type of music practice skills that are different from the initial skills they already have provide a reason to increase the competence of music practice needed in learning, see the existence of wider job opportunities, and their interest in the learning model of music practice they choose.

In the context of teacher professional development, the two choices of mastery of music skills are relevant to increase their confidence and sense of competence as educators. This is very important, as expressed by Biasutti and Concina (2018), that educators' belief in their musical skills greatly influences their professional identity as musicians or effective music educators, enhancing their teaching aesthetics and their ability to create a dynamic classroom atmosphere (Ang & Lewis, 2025). Likewise, prospective educators who choose new musical skills show a more diverse motivation in meeting the needs of music education and the demands of the job market. This is relevant to previous findings that prospective educators who continue to engage in music practice and become familiar with new musical instruments will be better able to develop their professional identities. In addition to expanding horizons, this action is also one of the efforts to prepare oneself to face the diversity of student needs in learning (Triantafyllaki, 2010; Yang, 2023).

Some findings reveal that the average learning outcomes in the music theory and music creativity course groups are below the average learning outcomes of other course groups. This shows that the success of learning between groups of interrelated courses has not been achieved optimally. Therefore, as a recommendation in the context of curriculum development, it can be done by integrating project-based learning into the curriculum. In addition to several things such as the preparation of special modules that emphasize the diversity of teaching methods needed

in dealing with heterogeneous classrooms, the development of sustainable professionalism for educators to support the interpretation and implementation of the developed curriculum and the implementation of collaborative activities outside of learning both in the form of workshops and festivals between students is a form of cooperative activities to encourage the development of creativity that is are needed in a career as a music educator in the future (Bilozerska et al., 2021; Bryant, 2022; Culp & Salvador, 2021; Hadjikou & Creech, 2023).

Researchers' limited access to academic grades and music proficiency test results for all students admitted in 2016 and 2020 prevented a more comprehensive analysis. This is because the available test samples are derived from only two admission pathways: the achievement pathway and the university-managed independent pathway. Meanwhile, the application of the three existing admission pathways may lead to differences in the initial potential of accepted student candidates. These differences may relate to academic ability, musical talent, musical experience, learning style, motivation level, socioeconomic status, and other factors. Therefore, further research is needed to address the limitations of generalization efforts and identify important factors that support the academic achievement of prospective music educators more broadly. Furthermore, the implementation of music ability tests across all Music Education Study Programs in Indonesia uses similar procedures and materials, although the characteristics of each music study program vary. Differences in institutional conditions and policies, cultural characteristics, local wisdom, vision, mission, goals, curriculum, and so on still provide room for research on issues of student selection and learning outcomes in the context of developing the competencies of future prospective music educators.

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