



The development of the Scat singing exercises in Jazz music

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Abstract

This creativity research is based on the qualitative method which aims to (1) study knowledge of scat singing and to create scat singing exercises in jazz music, and (2) evaluate student learning outcomes from the scat singing exercises. This study employed the research and development method. Research tools included structured interviews, index of item objective congruence (IOC), and achievement evaluation forms. Data providers were four jazz vocalists and jazz vocal instructors. The data collected were analyzed using the content analysis approach and presented in an essay format. The results revealed that steps for successfully practicing scat singing, consist of listening, syllable selection, song selection and rehearsal planning. The development of the scat singing exercises in jazz music found that the content of the exercises was divided into three difficulty levels: easy (1), medium (2), and difficult (3) and created in the form of video files, which were under the concept of jazz theory. The harmony included ii-V-I patterns, dominant seventh chords, and ascending and descending chromatic. The melody included non-harmonic tones (upper and lower neighboring tones), harmonic tones, tension notes, and enclosures. The rhythms included eighth notes, triplets, and quarter notes. There are twenty exercises and three levels of difficulty. The effective scat singing practice relies on having basic musical skills, especially those involving listening and imitating examples. The results of the scat singing evaluation from the target group of 20 participants, all first-year undergraduate students aged 18 or older majoring in jazz music, indicated a high level. The average score of knowledge and understanding was 4.19 with a standard deviation of 0.45 ($M = 4.19$, $SD = 0.45$). The average score of application was 4.30 with a standard deviation of 0.53 ($M = 4.30$, $SD = 0.53$).

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Introduction

Jazz music is a genre created by African Americans in the early 20th century, originating from blues and ragtime music. A key element of jazz performance is improvisation, which involves thinking and acting in the moment. Interesting improvisation depends on individual creativity and is not limited only to instruments but also to vocalists' improvisation.

Jazz vocalists mainly communicate with musicians and the audience. Their voice serves as an instrument known as scat singing. Vocal improvisation is more challenging than instrumental improvisation as it requires auditory skills, pitch accuracy, theoretical knowledge, imagination, emotion, and creativity (Weir, 2001, p. 23).

Today, jazz music is widespread in Thailand among both singers and listeners. Various activities such as jazz competitions, workshops, and concerts are held annually, attracting people's continuous interest and participation. However, only a few higher education institutions offer jazz courses, and it is found that there is a lack of resources for learning scat singing such as books, academic texts, and exercises. To spread the knowledge of scat singing broadly, exercises can be a tool to help beginners develop scat singing skills. This idea aligns with Seevarabuth's (2018, p. 91) view that skill exercises are an innovative teaching tool developed by instructors or trainers to help learners understand the lessons. Skill exercises allow learners to rehearse what they have learned and enhance their knowledge, understanding, proficiency, and thinking skill in students. Moreover, skill exercises are beneficial for both learners and those who are interested in the lessons.

Thus, to provide an opportunity for interested individuals to independently explore and develop scat singing skills and to address the teaching challenges of scat singing in Thailand as well as promoting and broadly expanding jazz singing curricula in Thailand, the researcher aimed to explore scat singing knowledge and create scat singing exercises in jazz music in the form of video files. The knowledge acquired from studying scat singing will provide an understanding of its principles in jazz music, and the techniques presented in the exercises can be applied to jazz music with similar characteristics.

Literature Review

From the study of literature related to creating scat singing exercises, the present study aims to explore the knowledge of scat singing and develop scat singing exercises, divided into 4 main topics as follows:

History of Jazz Music

Jazz music originated and evolved from the emotional and experiential expressions of African American slaves. The performance or singing of jazz initially lacked formal rules, notation, and standardized forms. Due to their socio-economic status and limited access to formal education, African Americans did not possess foundational skills in Western music theory. While engaged in labor, they frequently employed songs known as "Work Songs" to articulate their emotions. These work songs served as a critical foundation for the development of gospel music and blues, which subsequently led to the emergence of jazz (Laoherapanich, 2021, p. 33).

Scat Singing in Jazz Music

Jazz music is a genre that involves improvisation and collaboration among musicians. Improvisation presents a challenge that requires utilizing all musical skills at any given moment. The act of improvisation is a process where knowledge intersects with musical drama and natural expression (Jackson, 2002, p.45).

Scat refers to improvisation using vocalizations with nonsensical syllables or sounds that do not form actual words (Davis, 2012, p.231).

The historical development of the origins of scat singing reveals that to perform jazz singing, one must first learn to sing the blues. The origins of blues music can be traced back to the 17th century, a period when the United States had a large population of enslaved individuals (Shapiro, 2015, p.2).

The evolution of scat singing began with melodic variations and later developed into more complex and exciting melodies. This progression presents greater challenges for the vocalist. Music theory becomes essential, with chords, scales significant roles. As Weir (2015, p. 36) states, "Everything starts with chords and chord progressions. Beginning with root notes, the singer transitions to notes within the chord, employs chromatic movement, and then adjusts according to the chords."

Exercises

Exercises or skill practice materials refer to tools, innovations, or instructional media designed for students to practice skills in a particular subject. They include various interesting activities aimed at helping students review content, understand what they have learned, and consequently improve their learning behavior with increased proficiency and accuracy.

Additionally, they serve as tools to assess knowledge development and the ability to apply that knowledge effectively.

Good practice materials should have clear objectives and align with the intended goals. The language used and images should be appropriate for the age and background of the learners and should cater to individual differences. The materials should allow learners to practice independently and should include exercises at various levels of difficulty—easy, medium, and hard—so that learners can choose according to their abilities.

The Evaluation

Evaluation is the judgment concerning the quality or value of objects, projects studying the work behavior of workers, or the knowledge and abilities of students. Thus, evaluation is a process of assessing value (Ebel & Frisbie, 1986, p. 13).

The evaluation process consists of planning, implementation, reporting and dissemination of evaluation information. The main goal of evaluation is to produce evaluation results that can be used to develop the value of what is being evaluated. Therefore, evaluation results are an important factor that influences the use of evaluation results and causes subsequent impacts.

The dissemination of evaluation information is a process related to communication. Therefore, evaluators must have good communication skills and be able to develop creative strategies to find channels to disseminate information to those involved in the evaluation by selecting the type, format and presentation of evaluation reports that are appropriate for the target group. There are many ways to use evaluation results, including: Conceptual use: evaluation results may help spark ideas among those involved, resulting in greater understanding of what is being evaluated; Legitimate use: evaluation results may be used as reasons to support or confirm pre-determined decisions; Symbolic use: evaluation results may be used as a tool to monitor, direct or control the evaluation to see if it has been done according to the specified guidelines; and Instrumental use: evaluation results may be used as a tool for improvement, correction and impact on subsequent changes. The use of evaluation results can affect operations at both the individual and organizational levels, potentially causing changes in the behavior of members of the organization, work methods and regulations of the organization. Organizational structure and organizational culture (Kanjanawasee, 2011, p. 151).

Methodology

This research utilized the Research and Development (R&D) framework, which consisted of four stages:

Stage 1 (Research: R1): First, literature review on jazz music theories and scat singing was done. The target group and informants were selected by the researcher. The target group were selected based on criteria established. The criteria for the target group included individuals with a background in vocal performance who were currently studying in their first year of an undergraduate program, aged 18 or older and majoring in jazz music. The target was not gender-specific and consisted of 20 participants.

The researcher selected the sample song using a purposive sampling, by selecting “All of me” from the album *Swingin’ Easy* by Sarah Vaughan, recorded in 1957. The song was composed in 1931 by Seymour Simons and Gerald Marks. It was first introduced by Belle Baker, a Vaudeville star, who introduced the song to the public via radio in 1931 and performed it on stage at the famous Fisher Theatre in Motor City. Soon after, song became popular. “All of Me” serves as a tool for developing scat singing exercises in jazz music. This song is categorized as a jazz standard and is widely popular for both vocal performance and instrumental arrangements. Its slow harmonic progression makes it suitable for beginners in scat singing. The exercises are developed from Sarah Vaughan’s scat in “All of Me,” as her scat style features clear lyrics, a wide vocal range, and a variety of syllables. Each exercise has a fixed tempo of quarter notes equal to 120 bpm in a swing rhythm.

There are 20 exercises in total. The content of the exercises was divided into three difficulty levels: easy (1), The melody uses harmonic tones, the harmony employs ii-V-I patterns, and the rhythm consist of triplets and quarter notes; medium (2), The melody included harmonic tones and tension notes, the harmony employs ii-V-I progression, The rhythms included eighth notes, triplets, and quarter notes, the harmony followed an ii-V-I progression; and difficult (3), it is an application that takes exercises 1 and 2 and develops them into 3. This difficult exercise (3) consists of a melody that includes harmonic tones and tension notes, harmony that employs an ii-V-I progression, and rhythms that include eighth notes, triplets, and quarter notes.

In the selection of key informants, the researcher specifically chose four individuals who were jazz vocalists and jazz vocal instructors. Additionally, for the evaluation of instrument quality, the researcher selected

three experts with specialized knowledge in jazz music, jazz vocal instruction, and western vocal instruction. Next, interview forms and tools were validated by three qualified individuals. Then, informal interviews regarding scat singing were conducted.

Stage 2 (Development: D1): Scat singing exercises in jazz music were validated by advisors and three experts. The researchers selected these experts based on their expertise in jazz music, teaching jazz performance, and teaching western vocal music. Instructional videos and the evaluation form were developed and assessed by three experts. Later, the exercises were revised and adjusted into the complete versions.

Stage 3 (Research: R2): After creating the exercises, the researcher developed them into online media and applied them to a target group of 20 participants. by organizing a 3-day workshop on scat singing, with eight hours each day. Evaluation of scat singing proficiency using the exercises in jazz music and non-participant observation were performed. The scat singing exercises were analyzed using descriptive statistics. Evaluation of scat singing proficiency using the exercises in jazz music and non-participant observation were performed. The scat singing exercises were analyzed using descriptive statistics. The data analyzing was in two aspects: 1) knowledge and understanding consisting of 5 aspects: understanding the concept of scat singing, choosing syllables, the scat singing exercises are beneficial and can help develop skills., explaining scat singing according to its principles, and understanding swing rhythms, and 2) application consisting of three aspects: applying the concepts and knowledge you have gained, selecting lyrics and creating your own scat style, and conveying knowledge to others effectively, by calculating the mean (M) and standard deviation (S.D.) and scoring each item.

The scoring criteria were set using a 5-level (Likert Scale) as follows:

Score Level	Consideration:
5 points	Most
4 points	Much
3 points	Moderate
2 points	Little
1 point	Least

The evaluation criteria will consider the average score as follows:

Average Score Level	Consideration:
Average between 4.51 – 5.00	Most
Average between 3.51 – 4.50	Much
Average between 2.51 – 3.50	Moderate
Average between 1.51 – 2.50	Little
Average between 1.00 – 1.50	Least

Then, the average scores for each item are summed and divided by the number of items to obtain the overall average score for that aspect. The resulting score is then interpreted and summarized.

Stage 4 (Development: D2): Scat singing achievement was analyzed through the non-participant observation in order to improve the activities to be suitable, and the results were concluded, discussed, and disseminated to the general public.

Research Tools

The researcher developed research tools from data collection from documents, textbooks, academic papers, and interviews. The tools included structured interviews, Index of Item Objective Congruence (IOC), Scat singing exercises and Achievement evaluation forms.

Results

In this study, the researcher presented the data analysis by dividing the information into two objectives as follows:

The First Objective of the Research; the Result is Divided into Two Parts as Follow:

Part 1: Knowledge of scat singing

The researcher studied the knowledge of scat singing by interviewing four individuals who were jazz vocalists and jazz vocal instructors. The researcher identified issues related to scat singing, including practicing scat singing, choosing syllables, vocal techniques, model songs, and effective scat singing. The study of scat singing knowledge from key informants outlined the following guidelines for practicing scat singing. The results of the study found the steps for successfully practicing scat singing as follows:

In practicing scat singing, the first step should be listening to and practicing the main melody by choosing songs with a simple main melody and study examples of transcribed scat songs at an easy level sung by vocalists or played with instruments such as the saxophone, trumpet, trombone, etc. A detailed analysis of how the main melody works with the harmony should also be performed to understand the principles. Practitioners should have basic jazz music theory knowledge including scales, modes, and various types of dominant seventh chords and should practice major scales, minor scales (melodic minor, harmonic minor, natural minor), blues scales, and pentatonic scales. Then, select favorite phrases from transcribed songs to use in creating one's own scat and apply this to other songs.

Choosing syllables for scat singing can be done freely. The best syllables depend on the rhythm and articulation of the notes, for example, by singing “Do Bah Bah Do Dat / Do Bah Do Bah Do Da” to match the rhythm of the notes. Singing short, sharp notes, a singer might use syllables starting with similar vowels like “ta” or “pa.” For very short notes, use “Doo Dun Dil,” etc. The simplest method is to practice by imitating the syllables from the transcribed songs as accurately as possible or mimicking the sounds of the instruments heard.

Vocal techniques affecting scat singing are that vocalists must use their vocal range correctly, control volume, create rhythms, and manage breath to produce accurate melody pitches. Scat singing focuses less on beauty and more on tone and timbre changes as it has no difference from normal use of voice.

Model songs for practicing scat singing include blues songs such as “Straight No Chaser” composed by Thelonious Monk, Jazz standard songs including “Route 66” by Bobby Troup, “Take the A Train” composed by Billy Strayhorn, “Satin Doll” composed by Duke Ellington and Billy Strayhorn, with lyrics by Johnny Mercer “Billie’s Bounce” composed by Charlie Parker “Equinox” composed by John Coltrane and “All of Me” composed by Gerald Marks and Seymour Simons. Transcriptions from trombone solos by Curtis Fuller in “Blue Train” from John Coltrane’s album “Blue Train” are also useful. The style and accent of the songs influence scat singing, and the choice of songs depends on personal preference. Model artists include Bobby McFerrin, Louis Armstrong, Ella Fitzgerald, and Sarah Vaughan.

Effective scat singing practice involves planning, practicing with instruments like the piano, listening to a lot of music, performing publicly, joining music events, and recording oneself singing to analyze personal performance and practice swing rhythm patterns using quarter notes, triplet notes, and quarter notes.

Part 2: Creating scat singing exercises in jazz music

Creating scat singing exercises in jazz music involved using scat singing knowledge and Sarah Vaughan’s scat singing in “All of Me” from the album “Swingin’ Easy,” recorded in 1957. The song was composed in 1931 by Seymour Simons and Gerald Marks. It was first introduced by Belle Baker, a Vaudeville star, who introduced the song to the public via radio in 1931 and performed it on stage at the famous Fisher Theatre in Motor City. Soon after, the song became popular. A total of 20 exercises were developed by choosing various motifs and using sequence techniques with transpositions to cover all scales. The exercises ranged in pitch from

F3 to G5 and the lyrics were revised into a suitable format. The exercises were divided into three difficulty levels: easy (1), medium (2), and difficult (3), summarized as follows:

Example 1 The development of the scat singing exercise in Level 1 shown in 2 figures (Figure 1 and 2).

From example 1, the original notes in bar 22 of the song developed to the scat singing exercise no. 3 in Level 1 as shown in Figure 1 and 2. All pitch levels were derived from the original notes, with the melody and harmony transposed down by a half step. The melody consisted of chord notes and lower neighboring tones (LN).

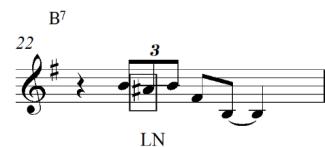


Figure 1 The original notes in bar 22 of the song

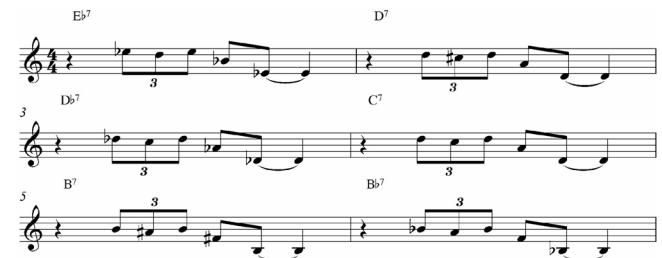


Figure 2 Exercise no. 3

Example 2 The development of the scat singing exercise in Level 2 shown in 2 figures (Figure 3 and 4).



Figure 3 The original notes in bar 23–25 of the song



Figure 4 Exercise no. 15

From example 2, the original notes in bar 23–25 of the song developed to the scat singing exercise no. 15 in Level 2 as shown in [figure 3](#) and [4](#). All pitch levels were derived from the original notes, with the melody transposed down by a half step. The melody included chord notes and tension notes (b9 in bar 23 at F, b13 in bar 24 at C, and enclosures (EC) in bar 24–25 at Bb and G# to A in bar 25). The harmony followed an ii-V-I progression.

Example 3 The development of the scat singing exercise in Level 3 shown in 3 figures ([Figure 5](#), [6](#) and [7](#)).

From example 3, the original notes in bar 23–25 of the song from exercises 15 in Level 2 and 13 in Level 1 were combined to develop the scat singing exercise no. 20 in Level #3 as shown in [figure 5](#), [6](#) and [7](#). All pitch levels were derived from the original notes, with the melody transposed down by a whole step. The chord followed an ii-V-I progression. The melody included chord notes and tension notes (b9 in bar 23 at F, b13 in bar 24 at C, and enclosures (EC) in bar 24–25 at Bb and G# to A in bar 25). The melody of exercise 13 was in Am (Maj7) chord, which can also be used with Am7.

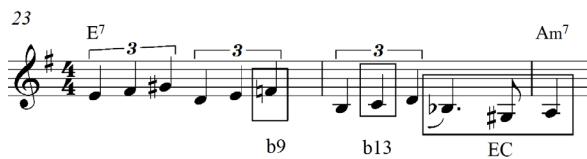


Figure 5 The original notes in bar 23–25 of the song



Figure 6 The original notes in bar 25 of the song



Figure 7 Exercise no. 20

The Second Objective of the Research; The Results are as Follows:

Evaluate student learning outcomes from the scat singing exercises.

The researchers studied knowledge of scat singing and created scat singing exercises in jazz music in accordance with the first objective. After creating the exercises, scat singing exercises in jazz music were validated by advisors and three experts. The researcher developed them into online media and applied them to a target group of 20 participants, who were first-year undergraduate students majoring in jazz at Conservatory of Music, Rangsit University, by organizing a 3-day workshop on scat singing, with eight hours each day. A scat singing workshop for jazz was organized, featuring scat singing experts as speakers. The training content was divided into topics including the history of jazz, jazz artists and songs, jazz improvisation, and scat singing group activities. Data were collected from behavior observation and scat singing achievement scores were analyzed in order to use the exercises in two aspects:

1. Knowledge and Understanding

The average score was 4.19 with a standard deviation of 0.45 ($M = 4.19$, $SD = 0.45$). It was found that the target group demonstrated a good understanding of scat singing, creativity in motif creation, and appropriate syllable selection at a high level.

2. Application

The average score was 4.30 with a standard deviation of 0.53 ($M = 4.30$, $SD = 0.53$). It was found that the target group applied the knowledge gained from the trainings and were able to select appropriate syllables and effectively conveyed the concepts to others at the high level. [Figure 8](#) show that participation in the target group's scat singing training.



Figure 8 Participation in the target group's scat singing training

Discussion

The study of scat singing knowledge led to the discovery of the following steps for successfully practicing scat singing:

Listening

The first step in starting to practice scat singing is listening. This includes listening to the main melody of songs, listening to original transcriptions from vocalists or instruments at an easy level that features a slow harmonic progression, making it suitable for beginners in jazz singing and listening to various scales from basic to advanced. Listening helps in recognizing notes and harmonies, aiding the understanding of how the main melody works with harmonies. After this, a practitioner chooses favorite phrases and creates his or her own scat, emphasizing repetitive practice with subsequent songs.

Syllable Selection

When choosing syllables for scat singing, there are no set lyrics; one can freely vocalize as appropriate to the rhythm of the notes. Common English consonants used include D and B, combined with vowels. The simplest method is imitating syllables from vocalists or instruments heard. The focus is not on the beauty of the sound but on tone changes and timbre. Despite the similarities to regular vocal sounds, basic singing techniques affecting pronunciation and breath control are necessary. This aligns with Euprasert (2017, p.98), who stated that in selecting scat lyrics, studying the originals (such as saxophone or trumpet sounds) is recommended, as the specified lyrics can be adjusted for suitability. Each person's different singing techniques can highlight different vowels clearly, which can be adapted to individual preferences. When choosing syllables, one should consider the appropriateness for controlling the character of each note as there are a lot of stressed words used in scat singing. Commonly used vowels for emphasis are 'ee' (or 'ay') for high notes and 'ah' and 'oo' (or 'ay') for low notes.

Song Selection

Model songs for practicing scat singing include blues songs and jazz standard songs. However, the selection of songs depends on the preferences of each person. Model artists include Bobby McFerrin, who employs

high-pitched vocal techniques and develops motifs to create diversity in pitch range, rhythm, and harmony. Louis Armstrong, who can effectively convey the swing rhythm, which is the heart of jazz music. Ella Fitzgerald, who utilizes motifs and melodic sequences with major and minor scales, pentatonic scales, and arpeggios, as well as connecting melodic lines with chromatic notes, a unique style of improvisation similar to a question-and-answer style, and Sarah Vaughan, who uses both low and high notes.

Rehearsal Planning

Effective scat singing requires planning each practice session to achieve efficiency and gain new perspectives from other vocalists or musicians, as well as to inspire continued practice. Finding performance opportunities, attending live performances, and recording oneself during practice are beneficial. This idea aligns with Baker (2010, p.23), who mentions the important skills for scat singing, and introducing to singers and jazz musicians that scat singing involves the use of nonsensical or improvised syllables during vocal improvisation. Scat solos are often found to mimic a variety of instrumental techniques and styles. There is not a fixed or only single method for teaching scat singing; the improvisational nature of the technique encourages experimenting with different styles and approaches. However, developing aural skills, understanding theoretical concepts, and refining vocal techniques are essential components of learning scat singing. Listening to exemplary scat singers such as Ella Fitzgerald, Cab Calloway, Carmen McRae, Sarah Vaughan, Al Jarreau, Karrin Allyson, Dave Matthews, Bobby McFerrin, and Jon Hendricks is highly beneficial. These artists offer a broad range of styles and interpretations, making them ideal models for those learning scat singing.

The creating of scat singing exercises in jazz music was based on the scat in Sarah Vaughan's version of "All of Me," a notable jazz artist. These exercises help improve scat singing and are particularly beneficial for undergraduate vocal students in Thailand, as well as those interested in scat singing. From the analysis of the research results, it was found that in the exercises developed using jazz music theory, the content consisted of three main components: harmony, melody, and rhythm.

The harmony follows the original motif's chord progression, including ii-V-I patterns, dominant seventh chords, and ascending and descending chromatic lines.

The ii-V-I progression is used most frequently to develop the ability to recognize harmonies. It is a common basis for improvisation. This idea aligns with Baker (2010, p.24) that prerequisite skills to scat singing are foundational understanding of music theory and the ability to identify changing harmonic progressions by ear. Practicing exercises based on the ii, V, I chord progression within the circle of fifths can help students recognize chord symbols and internalize harmonic changes. As students become more comfortable with chord structures and spellings, this exercise can be extended to include more complex progressions.

The melody follows the original notes, using various notes to reflect jazz accents, including non-harmonic tones (upper and lower neighboring tones), harmonic tones, non-chord tones (b9, b13, and #11), and enclosures. This use of notes aligns with Lopez-Brandt (2023, pp.62–63), who analyzed the improvisation of three musicians in Miles Davis's "So What" and found that the musicians used individual musical elements and performance accents to create interesting improvisations, changed melodies for variation, and used tension notes to add a jazz flavor.

Rhythms in the exercises incorporated swing rhythms. To understand the swing rhythms and be able to apply them into practice, certain rhythms were selected for practice. The rhythms included eighth notes (quaver), triplets, and quarter notes. This corresponds with Fin (2000, p.16), who noted that swing rhythm practice, fundamental for drummers, often uses triplet-based rudiments, which requires practice to grasp the swing feel.

Evaluation of the use of these scat singing exercises in jazz revealed that effective scat singing practice relies on having basic musical skills. Individuals with foundational singing skills can quickly follow the exercises, especially those involving listening and imitating examples. Using the exercises provides a framework for developing new creative ideas independently. Continuous, planned practice leads to proficiency together with repeated exercises helping to master the skills. This approach aligns with Charoensook (1999, pp.13–17), who described a systematic teaching approach with four steps: (1) listening (listening to songs, an instructor's demonstration as part of the exercises, or other kinds of learning materials); (2) imitation (imitating the instructor's skills or his/her teaching materials); (3) repetition (learners repeatedly doing the practical exercises); and (4) internalization (after undergoing Step 3 until the learner becomes proficient), he/she will internalize the skills learned and practiced and be able to perform naturally.

Scat singing typically involves spontaneous, unprepared performance. Using set exercises for preparation is a form of practice that may seem less natural. However, this method ensures consistent practice, which is crucial for learning and allows singers to eventually "think outside the box" and enjoy the creative process of scat singing. This concept is supported by Baker (2010, p. 28), who describes students' scat singing performances, noting that the final one is typically a standard scat solo with specified chord progressions. While this method might appear "rehearsed" and lack the element of spontaneity, it ensures that each singer follows a consistent, dependable, and secure approach. Figure 9 show that exercise 1–20.



Figure 9 QR CODE: Exercise 1–20

Conclusion and Recommendation

The evaluation results from using scat singing exercises demonstrated the success of the target group in creating melodies and lyrics. To utilize exercise materials, the scat singing practice process should be further studied to provide guidance for successful rehearsals. Starting with exercises 1, 2, and 3 in sequence is recommended. Trainees can apply the motifs of each scat singing exercise to other songs with swing rhythms and can also create scat lyrics beyond the provided examples.

For future studies, it is advisable to develop scat singing exercises for practicing various rhythmic patterns. This will serve as a guide for further knowledge development in scat singing for students, singers, and interested individuals. Creating online resources with English subtitles for music education would help disseminate musical knowledge globally. Additionally, it is suggested to develop scat singing exercises covering all vocal ranges—bass, tenor, soprano, and alto.

Conflict of Interest

The author declares that there is no conflict of interest.

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