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The Role of Conductors' Non-Verbal Cues in Shaping Elderly Choral Singers' Expressivity Perception: A Qualitative Study Exploration of Psychological Influences

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Abstract: This qualitative study explored how elderly choral singers' psychological traits shape their perception of conductors' non-verbal cues and how these cues influence their psychological experience of choral expressivity. Using constructivist grounded theory, data were collected through semi-structured interviews and observations of 30 singers (aged 60-78) from eight community choirs in Nanchang. Three interconnected themes emerged: positive facial expressions satisfied emotional validation needs and boosted confidence, whereas negative cues triggered anxiety, reflecting a positivity bias; slow and expansive gestures reduced cognitive load, while subtle or rapid movements caused confusion and undermined perceived competence; and cues resonating with life experiences fostered emotional connection, yet mismatches induced emotional dissonance. These findings underscore the necessity of adapting conductors' non-verbal communication to accommodate older adults' unique psychological characteristics, including positivity bias, need for validation, and age-related cognitive limitations. By proposing an elderly-centered framework, this study contributes to understanding how non-verbal communication in musical settings can enhance psychological well-being, offering practical implications for optimizing community choral programs to better support elderly participants' mental health.

Keywords: Choral Conducting; Facial Expressions; Gestures; Elderly Choral Singers; Perception of Expressivity; Qualitative Research; Grounded Theory

1. Introduction

1.1 Background

With the global rise in population aging, interest has grown in cultural interventions that support and enhance the quality of life of older adults. Choral singing, a low-cost and widely accessible collective activity, has been associated with lower levels of depression symptoms [1], improved cognitive function [2], and strengthened social cohesion [3]. In China, the number of community-based elderly choirs has grown from 120,000 in 2015 to over 600,000 in 2024 (Ministry of Culture and Tourism, 2024), reflecting strong demand for musical engagement among older adults.

Conductors are central to choral performance, relying primarily on facial expressions and gestures to communicate with singers [4]. Unlike verbal instructions, which may be compromised by age-related hearing loss [5], visual cues provide immediate guidance for timing, dynamics, and emotional expression. For example, a conductor's smile might encourage brighter vocal tones, while expansive arm movements could signal a crescendo [6]. However, elderly singers differ from younger counterparts in cue perception: age-related declines in visual contrast sensitivity hinder detection of subtle expressions [7], and slower cognitive processing delays responses to complex gestures [8]. Psychologically, older adults exhibit a "positivity bias"—prioritizing positive emotional stimuli [9]—which may alter their interpretation of conductor cues.

Existing research on conductor non-verbal communication has focused on professionals or students. Luck et al. found that college music students rated conductors with expressive faces as more "musically competent"" [10], while Van Weelden and Van der Sluis showed that expansive gestures improved synchronization among professional singers [11]. These findings cannot be generalized to the elderly, who face distinct challenges: a 70-year-old with presbyopia may struggle with gestures intuitive to a 20-year-old, and a conductor's frown may trigger greater anxiety in older singers.

With its emphasis on subjective experiences and contextual insight, qualitative research is uniquely positioned to bridge this gap—critical for exploring how elderly singers make sense of conductor cues in real rehearsals. Unlike quantitative studies that isolate cues, qualitative inquiry captures real-world complexity, such as how a conductor's smile interacts with gestures to shape singer confidence.

1.2 Research Significance

Choral Conducting Studies: Expands non-verbal communication literature by centering elderly perspectives, moving beyond "one-size-fits-all" conducting models to develop contextually tailored frameworks.

Gerontology: Enriches "cultural aging" research by exploring how non-verbal communication mediates elderly engagement in collective activities, highlighting emotional affirmation's role in musical participation.

Qualitative Music Psychology: Demonstrates grounded theory's value in unpacking subjective musical experiences, providing a methodological template for future studies of elderly musical engagement.

1.3 Practical Significance

Conductor Training: Offers specific guidelines (e.g., sustained positive expressions, slow gestures) to improve communication with elderly singers.

Choir Design: Informs rehearsal protocols aligned with elderly needs, such as extended warm-ups for cue familiarization.

Policy Support: Advocates for funding elderly-centered choral programs, emphasizing their role in healthy aging.

1.4 Research Questions

(1) How do elderly choral singers perceive and interpret conductors' facial expressions in rehearsals?

(2) How do elderly choral singers perceive and interpret conductors' gestures, and what makes gestures accessible?

(3) How do conductors' facial expressions and gestures interact to shape elderly singers' expressivity experience?

2. Literature Review

2.1 Facial Expressions

Facial expressions are universal emotional communication tools [12] that complement technical cues in choral settings. Davidson observed that professionals use faces to "frame" emotion—frowning for sadness, smiling for joy [13]. Thompson et al. found that professional singers adjusted dynamics 30% more in response to facial cues than verbal instructions [14], as faces are processed rapidly by emotional brain regions.

However, age differences are overlooked. Elderly individuals struggle to detect subtle facial features [5], and their positivity bias amplifies positive expression effects [9]. Mather and Carstensen [15] observed that older adults exhibit a 40% higher likelihood of remembering positive facial expressions, which implies that positive cues from conductors may have enduring effects.

2.2 Gestures

Conducting gestures are categorized by expansiveness (size, speed, range) and clarity [6]. Expansive gestures convey energy, while restrained movements signal calm [11]. Bishop et al. [16] used motion capture to show gesture amplitude correlates with perceived "musical intensity" ($r = .62$, $p < .001$).

For the elderly, clarity is critical. Owsley found adults over 65 have 25% reduced visual contrast sensitivity [7], making small/rapid gestures "blurred." Salthouse [8] noted slower cognitive processing requires 1.5-2 seconds more to interpret complex gestures. Yet no qualitative research explores how elderly describe these challenges—e.g., framing unclear gestures as personal failure or conductor oversight.

2.3 Physiological Traits

Visual Acuity: Presbyopia and reduced contrast sensitivity hinder detection of subtle cues [5]; elderly singers often sit upfront to see conductors [3].

Cognitive Processing: Slower reactions delay gesture interpretation [8]; rapid gesture shifts confuse elderly singers.

Hearing Loss: Prevalent in 60% of adults over 65 (WHO, 2023), increasing reliance on visual cues.

2.4 Psychological Traits

Positivity Bias: Older adults interpret smiles as approval, frowns as rejection [9].

Social Connection: Positive cues signal group belonging, negative cues trigger exclusion

feelings [3].
Competence Needs: Limited musical training [1] makes clear, encouraging cues critical for confidence.

2.5 Research Gaps
(1) Population Limitation: No qualitative research on elderly singers' perception of conductor non-verbal communication.
(2) Contextual Blindness: Quantitative studies isolate cues, ignoring real-world interactions.
(3) Subjective Experience: Existing research overlooks how elderly frame cue misinterpretation (personal vs. conductor fault).

3. Methodology

3.1 Theoretical Framework
This study employed a constructivist grounded theory framework [17], which conceptualizes knowledge as a co-constructed product between researchers and participants. This aligns with exploring how elderly "make sense" of cues, rather than measuring objective responses.

3.2 Research Setting
Data were collected from 8 non-professional community choirs in Nanchang, each with 15-30 members focusing on traditional folk songs or 1950s-1980s music. Choirs were selected for dedicated conductors (≥2 years elderly experience) and regular weekly rehearsals.

3.3 Participants
Table 1. Participant Demographics (N = 30)

Characteristic	Category	n	%
Gender	Male	12	40
	Female	18	60
Age (years)	60-65	14	46.7
	66-72	12	40
	73-78	4	13.3
Choral Experience (months)	3-12	9	30
	13-24	15	50
	>24	6	20
Educational Level	High School or Below	18	60
	College	10	33.3
	Postgraduate or Above	2	6.7

30 elderly singers (60-78 years) were purposively sampled for age, experience, and education diversity. Inclusion criteria: ≥3 months choral experience, no severe visual/cognitive impairments, and willingness to participate. Demographics are shown in Table 1.

4. Data Collection

4.1 Semi-Structured In-Depth Interviews
Quiet spaces at the rehearsal venues served as the setting for semi-structured interviews, which were conducted in Mandarin and lasted 45 to 60 minutes. The guide, pre-tested with 3 pilots, included modules on facial expression perception, gesture perception, and cue-interaction effects. Each interview was audio-recorded; the recordings were then transcribed word-for-word and cross-checked to confirm their accuracy. The interview guide included three modules, with open-ended questions to encourage elaboration:
(1) Facial Expression Perception:
"Can you describe a time when the conductor's facial expression made you feel more or less confident while singing?"
"What facial expressions from the conductor do you find most helpful, and why?"
"How do you interpret it when the conductor frowns or avoids eye contact?"
(2) Gesture Perception:
"What do you notice about the conductor's hand movements during rehearsal? Are some easier to follow than others?"
"Have you ever struggled to understand a gesture the conductor was making? What made it hard?"
"What changes to the conductor's gestures would make it easier for you to sing in time or with the right feeling?"
(3) Interaction of Cues and Expressivity Experience:
"How do the conductor's face and hands together make you feel like the choir is singing 'well' or 'expressively'?"
"Can you think of a time when the conductor's facial expression and gestures didn't match the music? How did that affect you?"

4.2 Observations
16 rehearsals (2 per choir, 2 hours each) were observed March-May 2024. The researcher took field notes on conductor cues, singer reactions, and contextual factors (lighting, seating). Notes were expanded post-rehearsal, and observations stopped at data saturation (14 rehearsals, 2 additional for confirmation).
Field notes focused on:
(1) Conductor Cues: Descriptions of facial expressions (e.g., "conductor smiled when the choir hit the high note") and gestures (e.g.,

"conductor used wide arm sweeps for the chorus, small movements for the verse").
(2) Singer Reactions: Observable responses to cues (e.g., "singers leaned forward when the conductor made eye contact," "a singer frowned and checked their sheet music after the conductor used a rapid gesture").
(3) Contextual Factors: Details about the rehearsal environment (e.g., lighting, seating arrangement) and music (e.g., genre, tempo) that might influence cue perception (e.g., "dim lighting made it hard to see the conductor's facial expressions").

5. Data Analysis

Data analysis followed Charmaz's constructivist grounded theory procedures: open coding, axial coding, and selective coding. Analysis began concurrently with data collection (an "emergent" approach), allowing initial codes to inform subsequent interviews and observations (e.g., if participants repeatedly mentioned "slow gestures," the observation guide was adjusted to focus on gesture speed).

5.1 Open Coding

Open coding involves breaking down data into discrete units and assigning descriptive labels (codes) to capture key concepts. The first author coded all interview transcripts and field notes line-by-line, using inductive reasoning (avoiding pre-conceived categories). For example:
From an interview quote: "When she smiles at me, I think 'Oh, I'm doing okay,' so I sing louder." → Codes: "positive facial expression (smile)," "emotional validation," "increased vocal participation."
From field notes: "Conductor used small hand movements; several singers looked confused and missed their entrance." → Codes: "restrained gesture," "perceptual confusion," "timing error."
A total of 327 open codes were generated. To ensure consistency, the second author coded 20% of the data independently; inter-coder agreement (Cohen's κ) was 0.86, above the 0.80 threshold for acceptable reliability [18]. Discrepancies were resolved through discussion.

5.2 Axial Coding

Axial coding involves grouping related open codes into broader categories and exploring the relationships between them (e.g., "what causes perceptual confusion?" "How does emotional validation affect participation?"). This step focused on identifying "axial codes" (categories) and defining their "conditions" (contexts that trigger the category), "actions/interactions" (responses to the category), and "consequences" (outcomes of the category).
For example, the axial category "Gesture Accessibility" was formed by grouping open codes like "slow gesture," "expansive gesture," "perceptual confusion," and "timing error." The relationships within this category were defined as:
(1) Conditions: Age-related visual limitations (e.g., presbyopia), complex gesture sequences.
Actions/Interactions: Conductors using slow, expansive gestures; singers leaning forward to see cues.
(2) Consequences: Improved timing accuracy; reduced confusion.
A total of 12 axial categories were identified, including "Emotional Anchoring via Facial Expressions," "Contextual Alignment of Cues," and "Competence Reinforcement."

5.3 Selective Coding

Selective coding involves integrating axial categories into a cohesive "core category" that captures the central phenomenon of the study. The core category emerged as "Elderly-Centered Conductor Non-Verbal Communication"—a framework that describes how conductors' facial expressions and gestures must prioritize emotional validation (to address the elderly's positivity bias) and cognitive accessibility (to address age-related sensory limitations) to shape expressivity perception.
Emotional Validation: Addressing the elderly's positivity bias and need for approval (e.g., sustained positive facial expressions).
Cognitive Accessibility: Accommodating age-related visual and cognitive limitations (e.g., slow, expansive, predictable gestures).
The core category was linked to the three most salient axial categories (now "themes") through a "storyline" that summarizes the study's findings:
"Elderly choral singers rely on conductors' positive facial expressions as emotional anchors to validate their participation, prioritize clear (slow, expansive) gestures as cognitive bridges to avoid confusion, and require cues to align with their life experiences and musical background—all of which together shape their perception of choral expressivity."

5.4 Memo-Writing and Peer Debriefing

Throughout analysis, the research team wrote reflective memos to document emerging ideas, theoretical connections, and methodological decisions (e.g., "Why are positive expressions more impactful than neutral ones? Maybe because of the elderly's positivity bias"). Memos were shared with a peer reviewer (a professor of music education with expertise in qualitative research) for feedback, which helped refine the core category and themes.

5.5 Trustworthiness

To ensure the rigor of qualitative findings, four strategies were used [19]:

(1) Credibility: Triangulation of interviews and observations; member checking (10 participants reviewed their interview transcripts and the emerging themes to confirm accuracy, e.g., "Yes, that's exactly how I feel when the conductor frowns"); prolonged engagement (3 months of data collection to build rapport with participants).

(2) Transferability: Detailed descriptions of the research setting, participants, and methods (to allow readers to judge if findings apply to other contexts); inclusion of diverse participants (e.g., varying ages, educational backgrounds).

(3) Dependability: Detailed documentation of data collection and analysis procedures (a "audit trail"); inter-coder reliability checks.

(4) Confirmability: Use of verbatim quotes to support themes; peer debriefing to reduce researcher bias.

5.6 Ethical Considerations

The study was approved by the Institutional Review Board (IRB) of Jiangxi Institute of Applied Science and Technology (IRB Approval No.: 2025-11). Key ethical measures included:

(1) Informed Consent: Participants were provided with a simplified consent form (written in large font, with no jargon) that explained the study purpose, data collection methods, and their right to withdraw at any time. Consent was obtained in writing (or verbally for participants with limited literacy, with a witness present).

(2) Anonymity and Confidentiality: All participants were assigned pseudonyms (e.g., "Ms. Li," "Mr. Wang") to protect their identity; choir names were replaced with generic labels (e.g., "NanChang Community Choir A").

(3) Minimization of Harm: Interviews avoided sensitive topics (e.g., health issues unrelated to singing); if participants became emotional (e.g., discussing a negative conductor experience), the interview was paused to allow them to compose themselves.

(4) Data Security: Audio recordings and transcripts were stored on a password-protected server; hard copies of field notes were locked in a secure cabinet.

6. Findings

6.1 Facial Expressions as Emotional Anchors

Elderly singers consistently described conductors' facial expressions as "emotional anchors"—cues that validated their musical participation and shaped their confidence to express emotion in singing. Positive facial expressions (smiles, eye contact, raised eyebrows) were the most impactful, while negative expressions (frowns, avoidance of eye contact) triggered anxiety and reduced engagement.

(1) Positive Expressions

28/30 participants noted smiles/eye contact boosted expressive singing. Ms. Chen (68) explained: "When Teacher Huang smiles at me, I think 'I'm on key' and sing louder. Without her smile, I worry and hold back." Field notes confirmed: during Jasmine Flower, a conductor's smile increased singer volume; neutral expressions led to repeated sheet music checks. Sustained positivity was key. Mr. Liu (72) stated: "Teachers who smile once then go blank don't help. Teacher Wang smiles even when we mess up—making mistakes okay."

(2) Negative Expressions

Frowns/avoided eye contact induced anxiety. Ms. Zhao (65) recalled: "The conductor frowned during a slow song—I stopped singing, thinking I messed up. She later said she was checking sheet music, but I stayed nervous." Observations showed three singers paused after a conductor's frown, whispering "Did we err?"

(3) Neutral Expressions

Neutral faces caused ambiguity. Mr. Zhang (70) said: "Teacher Li's face never changes—I don't know if we're expressive. I just follow others." Observations showed no vocal adjustments during mood shifts with neutral conductors.

6.2 Theme 2: Gesture Clarity as a Cognitive Link

Gestures acted as "cognitive bridges" for timing and dynamics; slow, expansive, predictable

movements were preferred.

(1) Accessible Gestures

All participants favored slow, large gestures. Mr. Huang (75) noted: "Teacher Wang lifts her arm slowly—I have time to react. Big movements let me see from the back." Observations showed 2 timing errors with slow gestures vs. 11 with rapid ones.

Predictability mattered. Ms. Wu (62) said: "Teacher Huang's downbeat is always a downward hand movement—I know when to enter."

(2) Inaccessible Gestures

Restrained (wrist-only) or rapid gestures caused confusion. Ms. Yang (66) explained: "A past conductor used small wrist moves—I couldn't see from the second row. We sang too soft/loud." Observations showed 70% fewer dynamics errors with arm-based gestures.

Rapid gestures led to delays. Mr. Chen (73) stated: "Teacher Liu's fast hands make me sing a beat late—I sometimes stop."

(3) Balancing Expressivity & Accessibility

Participants wanted simplified, not eliminated, expressive gestures. Ms. Sun (69) said: "Teacher Zhang uses big gestures for loud parts, slightly smaller for soft— I see and feel the music." Observations showed such "simplified expressivity" increased singer connection to music.

6.3 Theme 3: Contextual Alignment of Cues

Cue effectiveness depended on matching musical emotion and elderly experiences.

(1) Musical Emotion Alignment

Mismatched cues caused dissonance. Mr. Liu (72) described: "Singing the sad Farewell to My Comrades, the conductor smiled and used fast gestures—it felt wrong. I just went through the motions." Observations showed flat tones and avoided eye contact. Aligned cues deepened engagement. Ms. Chen (68) said: "Singing My Motherland (a youth memory), Teacher's soft smile and warm gestures felt respectful—I sang with feeling."

(2) Experience Alignment

Cues matching limited musical training worked best. Ms. Wu (62) noted: "I don't know 'diminuendo,' but 'sing softer' with a slow downward gesture makes sense." Folk music familiarity favored repetitive gestures. Mr. Huang (75) said: "Folk songs repeat—gestures should too. Changing each verse confuses me." Professional-style gestures were misinterpreted. Mr. Chen (73) recalled: "A conductor used fancy gestures—I couldn't tell if she wanted louder/softer. We need simple cues."

7. Discussion

7.1 Theoretical Implications

This study advances three academic fields—choral conducting studies, gerontology, and qualitative music psychology—by centering the elderly's perspective on non-verbal communication and developing a grounded theory of elderly-centered conductor non-verbal communication.

(1) Choral Conducting Studies

Existing research on conductor non-verbal communication has focused on professional or young singers [10,11], assuming a "one-size-fits-all" model of cue design. This study challenges that assumption by identifying two core principles for working with elderly singers:

Emotional Validation: Unlike professional singers, who may prioritize technical feedback over emotional cues, elderly singers rely on sustained positive facial expressions (e.g., smiles, eye contact) to feel validated and confident. This aligns with socioemotional selectivity theory [9], which emphasizes the elderly's focus on emotional satisfaction.

Cognitive Accessibility: Elderly singers require slow, expansive, and predictable gestures to accommodate age-related visual [7] and cognitive (e.g., slowed processing speed) limitations. This contrasts with professional settings, where conductors may use rapid or complex gestures to convey nuance.

By articulating these principles, the study provides a contextually responsive framework for conductor training—moving beyond generic advice to address the unique needs of elderly choirs.

(2) Gerontology

This study enriches research on "cultural aging" [20] by demonstrating how non-verbal communication mediates the elderly's engagement with collective cultural activities. Previous gerontological research has highlighted the benefits of choral singing for well-being [1,2] but has not explored the role of conductor cues in shaping these benefits.

Our findings show that conductor cues are not merely "logistical tools" but key drivers of engagement:

Positive facial expressions reduce anxiety and increase feelings of belonging (addressing the elderly's need for social connection) [3].

Clear gestures reduce confusion and build confidence (addressing the elderly's need for competence validation) [21].

Contextually aligned cues enhance emotional connection to music (addressing the elderly's need for purpose and meaning) [21].

These findings suggest that cultural interventions for the elderly must consider not just the activity itself (e.g., singing) but also the interpersonal dynamics (e.g., conductor-singer communication) that shape participation.

(3) Qualitative Music Psychology

This study demonstrates the value of constructivist grounded theory for unpacking subjective experiences of musical interaction [22]. Unlike quantitative studies that measure "objective" responses (e.g., timing accuracy), qualitative methods allowed us to capture the elderly's lived experience—e.g., how a frown is interpreted as "rejection" rather than "concentration," or how a slow gesture is experienced as "supportive" rather than "slow-paced."

By prioritizing participants' language (e.g., "emotional anchors," "cognitive bridges," "emotional dissonance") [23], the study avoids imposing Western or professional musical frameworks on the elderly's experience. This approach can be replicated in future studies of marginalized musical groups (e.g., children, people with disabilities) to ensure their perspectives are authentically represented [24].

7.2 Practical Implications

The findings offer actionable insights for conductors, community choir leaders, and policymakers working with elderly populations.

(1) Conductor Training

Conductors working with elderly choirs should incorporate the following practices into their approach:

Prioritize Sustained Positive Facial Expressions: Use consistent smiles and eye contact to validate singers, even when correcting mistakes (e.g., "Let's try that again—great effort!" paired with a smile). Avoid neutral or negative expressions (e.g., frowning while reviewing sheet music) unless explicitly explained to prevent misinterpretation.

Design Accessible Gestures: Use slow (1.5-2 seconds per cue), expansive (arm-based, not wrist-only), and predictable (consistent downbeats, repeated dynamics signals) gestures. For example, use a slow upward arm movement for "sing louder" and a slow downward movement for "sing softer"—avoid rapid or multi-step cues.

Align Cues with Context: Match facial expressions and gestures to the emotional tone of the music (e.g., soft smiles for nostalgic songs, gentle gestures for sad songs) and the singers' musical background (e.g., avoid technical jargon; pair simple language with gestures).

These practices can be integrated into conductor training programs (e.g., workshops for community music leaders) to improve communication with elderly singers.

(2) Community Choir Design

Community choir leaders should optimize rehearsal environments to support cue perception:

Lighting: Ensure rehearsal spaces have bright, even lighting to enhance visibility of facial expressions and gestures (avoid dim or harsh lighting that creates shadows).

Seating: Arrange singers in a semicircle or U-shape to ensure all members have a clear view of the conductor (avoid rows where back-row singers struggle to see).

Rehearsal Structure: Include a 10-15 minute "cue familiarization" segment at the start of each rehearsal to review key gestures (e.g., downbeats, dynamics signals). This reduces confusion and builds confidence for new members.

(3) Policy Support

Policymakers should prioritize funding for elderly-centered choral programs that incorporate the study's findings. For example:

Fund conductor training workshops focused on non-verbal communication with the elderly.

Support community centers in upgrading rehearsal spaces (e.g., better lighting, seating) to accommodate elderly singers.

Promote intergenerational choral programs where elderly singers work with conductors trained in elderly-centered communication—strengthening both cultural (inheritance) and social connection.

This study has several limitations that should be addressed in future research.

7.3 Limitations

Sample Scope: The sample included 32 participants from 8 urban community choirs in NanChang. Findings may not generalize to rural

choirs (where rehearsal environments may be less formal) or elderly choirs in other countries (where musical traditions and cultural norms around non-verbal communication may differ).

Cross-Sectional Design: The study collected data at a single point in time, so we cannot explore how conductor-singer communication evolves over time (e.g., whether singers become more familiar with complex gestures after months of rehearsal).

Conductor Perspective: The study focused on singers' perceptions—we did not interview conductors to understand their intentions or challenges when working with elderly singers. This limits our ability to fully explain cue mismatches (e.g., why a conductor uses neutral expressions).

7.4 Future Research Directions

Expand the Sample: Conduct similar studies with rural elderly choirs in China and elderly choirs in Western countries to explore cultural and contextual differences in cue perception.

Longitudinal Design: Follow elderly choirs over 6-12 months to track how conductor-singer communication evolves and how it impacts long-term engagement (e.g., rehearsal attendance, well-being).

Include Conductor Perspectives: Interview conductors working with elderly choirs to understand their training, challenges, and strategies for non-verbal communication. This would allow for a more holistic understanding of conductor-singer dynamics.

Explore Technology Support: Investigate whether technology (e.g., large-screen displays of conductor gestures, wearable devices that vibrate to signal cues) can enhance cue perception for elderly singers with severe visual or hearing impairments.

8. Conclusion

This qualitative study explores how elderly choral singers perceive conductors' facial expressions and gestures, and how these cues shape their experience of choral expressivity. By centering the elderly's perspective, we identify three core themes: (1) positive facial expressions serve as "emotional anchors" to validate participation; (2) slow, expansive, and predictable gestures act as "cognitive bridges" to reduce confusion; and (3) cues must align with musical emotion and the elderly's life experiences to avoid "emotional dissonance."

These findings contribute to a grounded theory of elderly-centered conductor non-verbal communication, which challenges generic models of conducting and prioritizes the unique physiological and psychological needs of the elderly. Practically, the study provides actionable strategies for conductors, choir leaders, and policymakers to design more inclusive and engaging choral programs for the elderly.

In an aging society, cultural activities like choral singing are critical for promoting well-being and social connection. By improving conductor-singer communication, we can ensure that elderly singers not only participate in these activities but also experience the full emotional and social benefits they offer.

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