Research Article
The current issue and full text archive of this journal is available on Thaijo at:
https://so01.tci-thaijo.org/index.php/emi

Received 16 October 2024 Revised 17 December 2024 Accepted 20 December 2024

The Influences of Intrensic and Extrinsic Motivation on Chorus Class Participation of Students Majoring in Music Performance at Chengdu Universities

Qin Li[1] and Pimurai Limpapath[2]
[1,2]Suryadhep Teachers College, Rangsit University
*Corresponding Author, e-mail: drpimurai.l@gmail.com

Abstract

This study explored the influences of intrinsic and extrinsic motivation on chorus class participation of first- and second-year students in the Music Performance Program at Chengdu universities. A survey research design was used with questionnaires distributed to a sample of 339 students taking chorus classes. Descriptive statistics with mean, standard deviation, frequency, and percentage were employed, followed by inferential statistics of enter multiple regression. The results showed that challenge and curiosity of intrinsic motivation and efforts to please teachers and dependence on the teachers' guidance of extrinsic motivation appeared to have the highly positive influenced on students' class participation. With peer interaction had a positive coefficient of 0.419 and significantly influenced chorus class participation. Teacher support also showed a positive impact with a coefficient of 0.281 and was found to be significant. Additionally, student enjoyment emerged as the strongest factor, with a coefficient of 0.900, demonstrating its substantial effect on choral class participation. These results highlighted the critical roles of peer interaction, Teacher support, and student enjoyment in fostering active participation in chorus classes. It is recommended that these factors should be systematically integrated into Musical Program to enhance student engagement and strengthen Chorus Education in Chengdu universities and beyond.

Keywords: Motivation; Chorus Class Participation, Music Performance Students, Chengdu Universities

Introduction

While Choras Singing is a collaborative art requiring teamwork, discipline, and dedication (Chen et al., 2022; Cupi & Cupi, 2020), it offers numerous benefits, such as fostering connections, building social networks, and developing musical abilities (Jiao, 2022). In Music Education, Choras Singing is crucial not only for singing skills development (Lonsdale & Day, 2021) but also for fulfilling the industry's demand for skilled professionals (Nápoles et al., 2021). In China, it has been mandatory, since 2012, according to the Ministry of Education of PRC that undergraduate Music Performance Programs must be effective (Zhou, 2022).

As a mandatory required by Chinese Education, Choral Education, with no exception, must be effective, thus, it is necessary to investigate the factors that mainly influence Coral Education, especially, concerning students' participation. One factor that is argued to be important in Choras Singing is participation, as it is seen as a vital factor that offers opportunities for chorus students to showcase their talents and gain diverse performance experiences (Rucsanda, 2020). Through participation, several skills, such as musical proficiency, self-esteem, interpersonal relationships (Akpur, 2021; Arzagon et al., 2022), leadership, and teamwork (Damsgaard & Brinkmann, 2022) are acquired as they also contribute to choir cohesion (Thararuedee & Wette, 2020). Simultaneously, in Choras Singing, cognitive abilities such as memory and attention have been shown to positively impact academic performance (Engels et al., 2021; Kennedy & Pek, 2023).

While participation appeared to be crucial in Chorus Singing, research has also shown that Intrinsic Motivation (personal passion) and Extrinsic Motivation (external recognition) have played significant roles in promoting effective participation (Pendergast, 2023; Myers, 2023; Zhang et al., 2020). As Motivation is defined as the internal and/or external drive that prompts individuals to take action toward achieving specific goals (Morsink et al., 2022). Intrinsic Motivation refers to the internal desire to engage in an activity for personal satisfaction and enjoyment (Fishbach & Woolley, 2022; Chiu, 2021), while Extrinsic Motivation is driven by external rewards or the avoidance of negative consequences (Morris et al., 2022).

While both forms of Motivation are believed to significantly influence students' participation, learning outcomes, and academic success, they also impact voluntary participation, problem-solving abilities, and overall performance (Barrick et al., 2013; Woolfolk, 2015). Intrinsic Motivation, driven by internal desires and personal fulfillment, fosters deeper learning and enhanced creativity (Bandhu et al., 2024; Ifenthaler, 2020; Kotera et al., 2021; Yun et al., 2018;). And Intrinsic Motivation is significantly bolstered when learners are presented with tasks that are neither too easy nor too difficult (Hensley et al., 2021; Ten, Kaushik, Oudeyer, and Gottlieb, 2021). As psychological needs such as autonomy, competence, and relatedness help enhance Intrinsic Motivation (Deci et al., 1991; Hira & Anderson, 2021; Ryan et al., 2021;) on the other hand, through the over-justification of excessive external rewards, Intrinsic Motivation can be undermined (Ntoumanis et al., 2021).

When it comes to participation, Extrinsic Motivation, which is driven by external incentives like grades or rewards, can be effective when aligned with Intrinsic interests (Kruglanski et al., 2018; Tanvir, 2021). Balancing Intrinsic and Extrinsic Motivation is essential for positive outcomes (Trigueros et al., 2019) of learning participation, sense of belonging, and good educational experiences (Areepattamannil et al., 2011; Othman & Leng, 2011; Rone et al., 2023). Since it helps promote autonomy, competence, and positive social interactions, thereby creating a supportive learning environment (Lucas et al., 2010; Maddens et al., 2023) with successful academic and personal development (Reiss, 2012). Therefore, understanding how Motivation influences participation is believed to be helpful to booth students' interest and enthusiasm in class to participate proficiently (Akpınar et al., 2013; Matteson et al., 2011).

Apparently above, whole both of the Intrinsic and Extrinsic Motivation seemed essential to students' Class Participation in several aspects, this study, thus, sought to address these gaps by examining how Intrinsic and Extrinsic Motivation specifically influence participation in Choral Education, with a focus on music performance of the students in Chengdu universities. By exploring these Motivational Factors, this research could fill in the gap in providing insights into enhancing effective Choral Education as require by Chinese Educational System. Accordingly, this study fulfilled a lack of research in Choral Class Participation in China by focusing on the

influences of Intrinsic and Extrinsic Motivation on Chorus Class Participation of the first- and second-year students majoring in Music Performance at Chengdu universities.

Research objectives

The research objective of this study is to examine the influences of intrinsic and extrinsic motivation on chorus class participation among first and second-year music performance students at Chengdu universities.

Conceptual framework

Independent Variables: Intrinsic Motivation and Extrinsic Motivation
Dependent Variable: Students' Chorus Class Participation

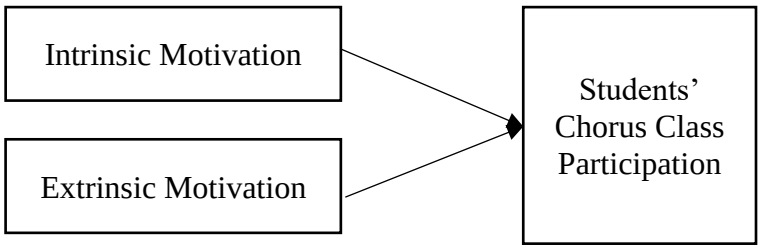

Figure 1 Conceptual Framework

Methodology

Population and Sampling

The population in this study included 678 the first and second years students majoring in music performance with official choral education from Chengdu University of Arts and Sciences and Sichuan Normal University in Chengdu, China which represent creativity and practical musical skills in Choral. In terms of the chorus classes, they were held twice a week for 16 weeks, with 15 sessions of 90 minutes each. The first 8 weeks focused on coursework to develop students' technical skills and theoretical understanding, while the subsequent 8 weeks were dedicated to practical activities, culminating in a final showcase where students presented their musical achievements.

When it comes to sampling, out of the 180 students at Chengdu University of Arts and Sciences, 90 were randomly selected using odd-numbered identifiers, and out of the 498 students at Sichuan Normal University, 249 were randomly selected using even-numbered identifiers. This systematic sampling method was used to ensure an equal chance of selection across both institutions, reducing potential bias while maintaining a manageable sample size. As a result, 339 students majoring in Chorus from the two universities were obtained as the sample of the study.

Instruments

This study employed a survey research design with the use of questionnaire. The scales used were adapted from: 1) The Effective Participation Scale (Güvenç, 2015), and 2) The Intrinsic-Extrinsic Motivation Scale (IEMS) (Çolak & Cirik, 2015).

The questionnaire utilized in this study was composed of two main parts. The first part focused on demographic information, including gender, age, years of chorus experience, and

educational level. The second part contained the items derived from two scales: the Motivation Scale and the Effective Participation Scale. First, the Motivation Scale with 33 items, categorized into two dimensions: Intrinsic Motivation, which measured personal interest, passion for music, and self-improvement goals, and Extrinsic Motivation which evaluated external influences such as teacher feedback, peer recognition, and rewards. Second, the Effective Participation Scale which included 20 items and divided into four dimensions: Behavioral Engagement, Emotional Engagement, Behavioral Disaffection, and Emotional Disaffection. Five Likert scale from Strongly Agreed to Strongly Disagreed was used to measure all the items.

Data Analysis

To ensure the validity of the questionnaire, first, content validity was assessed through an Item-Objective Congruence (IOC) index, where 5 experts reviewed the items to ensure alignment with the study's objectives and constructs which gained the result of 1. Then, a pilot study was conducted with a small sample of 30 Chorus students outside the sampling of the study as to ensure the clarity and interpretability of the items, as well as the overall time efficiency of the questionnaire. Then reliability using Cronbach Alpha Coefficients was 0.925.

Research results

First, descriptive statistics with mean, standard deviation, frequency, and percentage were run, followed by multiple regression. The Multiple Regression Analysis was conducted using the Enter Method, where all predictors were simultaneously entered into the model.

According to the demographic information of the 339 samples in this study, the majority of respondents were female, accounting for approximately 75.5 % of the total, while 24.5 % were male. In terms of age, students aged 18-19 were the average (50.4%), students aged 20-21 accounted for 44.2 %, and the remaining few samples were 22 years old or older (5.3 %). The first-year students accounted for about one-third (39.2 %) of the studied population, and second-year students accounted for about two-thirds (61.8 %).

The Result from Correlation Analysis

Table 1 presented the correlation analysis results between motivation dimensions and effective participation levels. Engagement showed a strong positive correlation with intrinsic motivation (Corr = 0.6772, $p < 0.001$) and a moderate positive correlation with extrinsic motivation (Corr = 0.3241, $p < 0.001$). In contrast, engagement had a negative correlation with disaffection (Corr = -0.2476, $p < 0.001$). Disaffection, as the opposite of engagement, also negatively correlated with both intrinsic and extrinsic motivation. These results highlight the influence of motivational factors on students' participation.

Table 1 Correlation Analysis of the Relationship between Motivation and Effective Participation Levels.

		Engagement	Disaffection	Intrinsic Motivation	Extrinsic Motivation
Engagement	$Corr$	1.0000			
	p				
Disaffection	$Corr$	-0.2476***	1.0000		
	p	0.0000			
Intrinsic Motivation	$Corr$	0.6772***		1.0000	
	p	0.0000	0.0000		
Extrinsic Motivation	$Corr$	0.3241***	-0.2098***	0.1014**	1.0000
	p	0.0000	0.0001	0.0623	

The Results of Multiple Regression

As shown in Table 2, the coefficients from a linear regression model predicting class participation used three independent variables: Challenge, Curiosity, and Independence Mastery. The "B" column presented the unstandardized coefficients, which represent the expected change in the dependent variable (Class Participation) for each one-unit change in the predictor variable while controlling for other variables. The R-squared value of 0.4650 indicated that approximately 46.5% of the variance in class participation was explained by the predictors in the model, which was Challenge, Curiosity, and Independence Mastery. The coefficient for Challenge was 0.691, indicating that for each unit increased in the challenge factor, class participation increased by 0.691 units. Curiosity appeared even stronger with a positive coefficient of 1.094, suggesting a substantial increase in class participation for each unit increase in Curiosity. Conversely, Independence Mastery had a negative coefficient of -0.898, implying that the higher levels of independence mastery were associated with a decrease in Students' Chorus Class Participation.

The t-statistics for Challenge, Curiosity, and Independence Mastery were 5.431, 7.921, and -7.420, respectively, all associated with a significance level (Sig.) of 0.000. This indicated that all three predictors were statistically significant at the 0.001 level, meaning the probability of these results occurring by chance was less than 0.1 %.

Overall, the results highlighted Curiosity as the strongest positive predictor of class participation, while Independence Mastery tended to negatively impact participation. Challenge also positively contributed to class participation, though to a slightly lesser extent than curiosity. These findings demonstrated the significant influence of these factors on students' participation in class.

Multiple predictor model:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \epsilon$$

Where:

Y is chorus class participation — x_1 is challenge

x_2 is curiosity — x_3 is independence mastery

β_0 is the intercept — $\beta_{1..3}$ is the coefficient

ϵ is the error aka residual

The multiple regression equation predicting Class Participation based on Challenge, Curiosity, and Independence Mastery was as follows:

$$Y = -1.871 + (0.691 * challenge) + (1.094 * curiosity) + (-0.898 * independence\ mastery)$$

Table 2 Coefficients of Regression Model Predicting Class Participation Based on Challenge, Curiosity, and Independence Mastery.

Model	B	Std. Error	t	Sig.
Constant	-1.871	.387	-4.838***	.000
Challenge	.691	.127	5.431***	.000
Curiosity	1.094	.138	7.92***	.000
Independence Mastery	-.898	.121	-7.420***	.000
R-squared = 0.4650	**F = 97.07**	**Sig. = 0.0000**		

Note: Dependent Variable: Class Participation

As illustrated In Table 4, the coefficients from multiple regression analysis examined the impact of several factors on class participation, including Challenge, Curiosity, Independence Mastery, Easy Work, Pleasing Teacher, and Dependence on Teacher. The unstandardized coefficients (B) indicated the expected change in class participation for a one-unit change in each predictor variable, holding other variables constant.

The coefficient for Challenge was 0.603, suggesting that higher levels of challenge were associated with increased class participation ($t = 5.113$, $p < 0.001$). Curiosity had the strongest positive coefficient of 0.900, indicating its significant role in boosting class participation ($t = 6.758$, $p < 0.001$). In contrast, Independence Mastery had a negative coefficient of -0.778, suggesting lower participation with higher independence mastery ($t = -6.548$, $p < 0.001$).

The coefficient for Easy Work was -0.068, which was negative, indicating a potential decrease in participation as tasks become easier, though this result was not statistically significant ($t = -1.075$, $p = 0.283$). Pleasing Teacher had a positive coefficient of 0.419, implying that efforts to please the teacher correlated with increased participation, a statistically significant result ($t = 5.007$, $p < 0.001$). Dependence on Teacher also showed a positive coefficient of 0.195, suggesting a moderate positive influence on class participation ($t = 3.576$, $p < 0.001$).

Overall, the results highlighted the importance of Curiosity and Challenge in promoting class participation, while Independence Mastery tended to have a negative effect.

Multiple predictor model:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \epsilon$$

Where:

Y chorus class participation	x_1 is challenge
x_2 is curiosity	x_3 is independence mastery
x_4 is easy work	x_5 is pleasing teacher
x_6 is dependence on teacher	β_0 is the intercept
$\beta_{1..6}$ is the coefficient	ϵ is the error aka residual

The multiple regression equation predicting Class Participation based on Easy Work, Pleasing Teacher, and Dependence on Teacher would be formulated as follows:

$$Y = 2.887 + (0.603 * challenge) + (0.900 * curiosity) + (-0.778 * independence\ mastery) + (-0.068 * pleasing\ teacher) + (0.419 * pleasing\ teacher) + (0.195 * dependence\ on\ teacher)$$

Table 4 Coefficients of Regression Model Predicting Class Participation Based on Challenge, Curiosity, Independence Mastery, Easy Work, Pleasing Teacher, and Dependence on Teacher

Model	B	Std. Error	t	Sig.
Constant	-2.887	.384	-7.526***	.000
Challenge	.603	.118	5.113***	.000
Curiosity	.900	.133	6.758***	.000
Independence Mastery	-.778	.119	-6.548***	.000
Easy Work	-.068	.064	-1.075	.283
Pleasing Teacher	.419	.084	5.007***	.000
Dependence on Teacher	.195	.054	3.576***	.000
R-squared = 0.568		**F = 72.697**	**Sig. = 0.0000**	

Note: Dependent Variable: Class Participation

Figure 2 showed the regression coefficients for predictors of class participation, highlighting Curiosity and Challenge as the strongest positive factors, while Independence Mastery had a significant negative impact. The error bars indicated the standard errors, providing insight into the precision of these estimates.

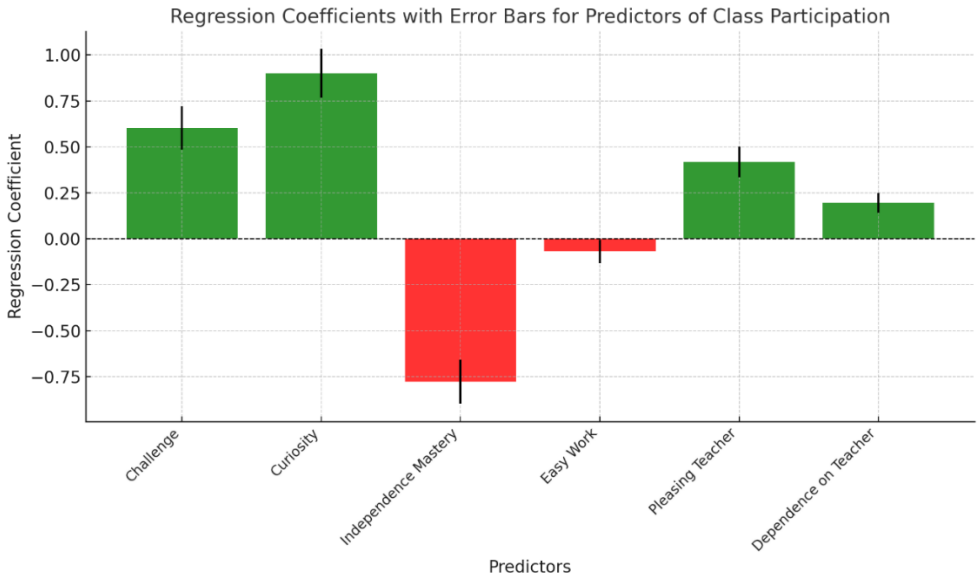

Figure 2 Predictors of Class Participation: Regression Coefficients with Error Bars

Discussion

This study highlighted the influences of motivation on student participation in chorus singing classes of the first- and second-year students majoring in music performance at Chengdu universities. Both intrinsic and extrinsic motivation were found to significantly influence students' participation in chorus classes. Intrinsic motivation, driven by personal satisfaction and enjoyment of music, was a primary factor that enhanced students' chorus class participation. The most significant influences of extrinsic motivation were grades and recognition.

Moreover, as Intrinsic Motivation emerged as a key driver of participation, it most significantly encouraged social factors such as peer interaction, pleasing teachers, and teacher support, especially in a collaborative participation environment. This can be explained by Qureshi et al. (2023) and Strayhorn (2018) who found that effective class participation and collaboration occur only when students feel their sense of belonging and commitment (Wang & Eccles, 2012) were developed while interacting with pleasure with their peers and teacher(s) during their chorus singing.

Effective participation, as discussed by Reschly and Christenson (2022), shows a close link to Intrinsic Motivation, with teachers playing a pivotal role through tailored instructional strategies and personalized feedback. This is consistent with Salas-Pilco et al. (2022), who found that when both Intrinsic and Extrinsic Motivations work well together, the benefits are evident through the process of Intrinsic enjoyment in chorus singing and the extrinsic appreciation of support from instructors with the opportunities to share performance with peers. Lastly, as intrinsic gratification fuels students to effectively engage themselves in the positive direction (Tasgin & Tunc, 2018) in chorus Class Participation while continuously complemented by different types of external rewards, more students will be positively self-motivated to do better and with higher levels of Choral Class Participation (Acquah et al., 2021; Borah, 2021).

As the negative influence of Independence Mastery on Students' Chorus Class Participation suggested that excessive emphasis on self-directed learning may reduce students' willingness to collaborate in choral settings. This finding aligned with prior research highlighting the importance of balancing autonomy with teamwork in group-based activities (Reeve & Cheon, 2021). In practical terms, educators might consider strategies to foster interdependence among students, such as collaborative exercises or peer-led rehearsals, to mitigate the potential downsides of high independence.

Conclusion

The findings highlighted the distinct roles of intrinsic and extrinsic motivation in influencing students' participation in choral classes. Intrinsic factors, such as curiosity and personal satisfaction, were strong predictors of active engagement, consistent with studies emphasizing the importance of fostering internal drive for sustained learning. Extrinsic motivators, like pleasing the teacher, also contributed positively, showing the value of aligned external reinforcement. The negative effect of Independence Mastery suggested that excessive independence may reduce collaboration, which was critical in choral settings. Similarly, overly simplified tasks appeared to decrease engagement, highlighting the need for appropriate challenge levels. These results underscored the importance of balanced educational strategies that integrate curiosity-driven learning with constructive feedback and collaborative opportunities to foster sustained participation.

Recommendations

Recommendation for Practice

Educators and curriculum designers should incorporate the research findings into choral education programs by fostering Personal Satisfaction, Curiosity, Enjoyment, and a Sense of Belonging while promoting a balance between Autonomy and Collaboration. This can be achieved through practical steps such as incorporating challenging and creative activities into the curriculum, providing teacher training on effective feedback techniques, and encouraging student-led rehearsals. To implement these strategies effectively, pilot programs should be conducted within selected universities, accompanied by regular evaluations such as surveys and observations to assess their impact. Findings from these pilots can guide broader curriculum reforms, initially in Chengdu universities and later across other Music Education Programs.

Recommendation for Future Research

Future studies should explore the long-term effects of intrinsic and extrinsic motivation on student participation through longitudinal research that tracks engagement and performance over time. Additionally, conducting comparisons choral education in different regions of China will offer insights for more inclusive and globally relevant teaching practices. Research should also focus on testing specific interventions, such as collaborative learning models or differentiated feedback strategies, through pilot programs that evaluate their effectiveness in real-world educational settings.

References

Acquah, A., Nsiah, T. K., Antie, E. N. A., & Otoo, B. (2021). Literature review on theories of motivation. *EPRA International Journal of Economic and Business Review, 9(*5), 25-29.

Akpınar, B., Batdı, V., & Dönder, A. (2013). Evaluating primary school students' motivation levels in science education in terms of gender and class variables. *Cumhuriyet International Journal of Education, 2*(1), 15-26.

Akpur, U. (2021). Does class participation predict academic achievement? A mixed-method study. *English Language Teaching Educational Journal, 4*(2), 148-160.

Areepattamannil, S., Freeman, J. G., & Klinger, D. A. (2011). Intrinsic motivation, extrinsic motivation, and academic achievement among Indian adolescents in Canada and India. *Social Psychology of Education, 14,* 427-439.

Arzagon, R. G., Zaragoza, M. A., & Mecida, S. V. (2022). Problems encountered with online class participation. *ASEAN Journal of Educational Research and Technology, 1*(2), 177-184.

Bandhu, D., Mohan, M. M., Nittala, N. A. P., Jadhav, P., Bhadauria, Kuldeep A., & Saxena, K. K. (2024) . Theories of motivation: A comprehensive analysis of human behavior drivers. *Acta Psychologica, 244,*104177. https://doi.org/10.1016/j.actpsy.2024.104177.

Barrick, M. R., Mount, M. K., & Li, N. (2013). The theory of purposeful work behavior: The role of personality, higher-order goals, and job characteristics. *Academy of Management Review, 38*(1), 132-153.

Borah, M. (2021). Motivation in learning. *Journal of Critical Reviews, 8*(2), 550-552.

Chen, K., Dong, H.-W., Luo, Y., McAuley, J., Berg-Kirkpatrick, T., Puckette, M., & Dubnov, S. (2022). Improving chorus music separation through expressive synthesized data from sampled instruments. In *Proceedings of the 23rd International Society for Music Information Retrieval Conference,* pp. 696-703. ISMIR. https://doi.org/10.48550/arXiv. 2209.02871

Chiu, T. K. (2021). Digital support for student engagement in blended learning based on self-determination theory. *Computers in Human Behavior, 124*, 106909.

Çolak, E., & Cırık, I. (2015). Analysis of motivational orientation of secondary school students. *Elementary Education Online, 14*(4), 1307-1326.

Cupi, B., & Cupi, A. (2020). Chorus singing and solo singing in the conditions of the society and the education system of our schools. *SSRN Electronic Journal*. http://dx.doi.org/10.2139/ssrn.3718630

Damsgaard, J. B., & Brinkmann, S. (2022). Me and us: Cultivating presence and mental health through choir singing. *Scandinavian Journal of Caring Sciences, 36*(4), 1134-1142.

Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist, 26*(3-4), 325-346.

Engels, M. C., Spilt, J., Denies, K., & Verschueren, K. (2021). The role of affective teacher-student relationships in adolescents' school engagement and achievement trajectories. *Learning and Instruction, 75*, 101485.

Fishbach, A., & Woolley, K. (2022). The structure of intrinsic motivation. *Annual Review of Organizational Psychology and Organizational Behavior, 9*, 339-363.

Güvenç, H. (2015). Development and adaptation study of engagement & disaffection scale. *Ahi Evran University Journal of Kırşehir Education Faculty (JKEF), 16*(1), 255-267.

Hensley, L., Sayers, R., Brady, A., et al. (2021). Supporting autonomy, competence, and relatedness in a learning-to-learn course: College students' insights into effective instruction. *Teaching of Psychology, 48*(3), 236-247.

Hira, A., & Anderson, E. (2021). Motivating online learning through project-based learning during the 2020 COVID-19 pandemic. *IAFOR Journal of Education, 9*(2), 93-110.

Ifenthaler, D., Gibson, D., & Zheng, L. (2020). Attributes of engagement in challenge-based digital learning environments. *Online Teaching and Learning in Higher Education*, 81-91.

Jiao, J. (2022). Action recognition model in chorus conducting teaching in colleges and universities under new media environment. *Computational Intelligence and Neuroscience, 2022*(9), 1-10.

Kennedy, J., & Pek, S. (2023). Mini-publics, student participation, and universities' deliberative capacity. *Studies in Higher Education, 48*(1), 63-82.

Kotera, Y., Taylor, E., Fido, D., et al. (2023). Motivation of UK graduate students in education: self-compassion moderates pathway from extrinsic motivation to intrinsic motivation. *Curr Psychol 42*, 10163-10176 https://doi.org/10.1007/s12144-021-02301-6

Kruglanski, A. W., Fishbach, A., Woolley, K., Bélanger, J. J., Chernikova, M., Molinario, E., & Pierro, A. (2018). A structural model of intrinsic motivation: On the psychology of means-ends fusion. *Psychological Review, 125*(2), 165.

Lonsdale, A. J., & Day, E. R. (2021). Are the psychological benefits of choral singing unique to choirs? A comparison of six activity groups. *Psychology of Music, 49*(5), 1179-1198.

Lucas, R. I., Pulido, D., Miraflores, E., Ignacio, A., Tacay, M., Lao, J., et al. (2010). A study on the intrinsic motivation factors in second language learning among selected freshman students. *Philippine ESL Journal, 4*(1), 3-23.

Maddens, G. J., Saba, M., & Katherine, B. (2023). Pavlovian learning and conditioned reinforcement. *Journal of Applied Behavior Analysis, 56*(3), 498-519. https://doi.org/10.1002/jaba.1004

Matteson, S. M., Swarthout, M. B., & Zientek, L. R. (2011). Student motivation: Perspectives from mathematics teachers. *Action in Teacher Education, 33*(3), 283-297.

Morris, L. S., Grehl, M. M., Rutter, S. B., Mehta, M., & Westwater, M. L. (2022). On what motivates us: A detailed review of intrinsic v. extrinsic motivation. *Psychological Medicine*, 1-16.

Morsink S., Van der Oord, S., Antrop, I., Danckaerts, M., & Scheres, A. (2022) Studying motivation in ADHD: The role of internal motives and the relevance of self-determination theory. *J Atten Disord.* Jun, *26*(8):1139-1158. https://doi.org/10.1177/10870547211050948.

Myers, M. J. (2023). Standards-based assessment for secondary chorus ensembles: A framework to document student learning. *Arts Education Policy Review, 124*(1), 1-12.

Nápoles, J., Silvey, B. A., & Montemayor, M. (2021). The influences of facial expression and conducting gesture on college musicians' perceptions of chorus conductor and ensemble expressivity. *International Journal of Music Education, 39*(2), 260-271.

Ntoumanis, N., Ng, J. Y., Prestwich, A., Quested, E., Hancox, J. E., Thøgersen-Ntoumani, C., Deci, E. L., Ryan, R. M., Lonsdale, C., & Williams, G. C. (2021). A meta-analysis of self-determination theory-informed intervention studies in the health domain: Effects on motivation, health behavior, physical, and psychological health. *Health Psychology Review, 15*(2), 214-244.

Othman, N., & Leng, K. B. (2011). The relationship between self-concept, intrinsic motivation, self-determination and academic achievement among Chinese primary school students. *International Journal of Psychological Studies, 3*(1), 90.

Pendergast, S. (2023). Two motivation frameworks for encouraging school chorus participation. *Update: Applications of Research in Music Education, 41*(2), 5-14.

Qureshi, M. A., Khaskheli, A., Qureshi, J. A., Raza, S. A., & Yousufi, S. Q. (2021). Factors affecting students' learning performance through collaborative learning and engagement. Interactive *Learning Environments, 31*(4), 2371- 2391. https://doi.org/10. 1080/10494820.2021.1884886

Reeve, J., & Cheon, S. H. (2021). Autonomy-supportive teaching: Its malleability, benefits, and potential to improve educational practice. *Educational Psychologist, 56*(1), 54-77.

Reiss, S. (2012). Intrinsic and extrinsic motivation. *Teaching of Psychology, 39*(2), 152-156.

Reschly, A. L., & Christenson, S. L. (2022). Jingle-jangle revisited: History and further evolution of the student engagement construct. In *Handbook of research on student engagement* (pp. 3-24). Springer.

Rone, N. A., Nova, A. A., Guao, Jariol Jr., M., Nanette, A., Kim, B., & Saro, J. (2023). Students' lack of interest, motivation in learning, and classroom participation: How to motivate them? *Educational Psychology*, *7*(1), 636-645.

Rucsanda, M. D. (2020). The role of the conductor of children choir in the improvement of interpersonal communication through music. *Bulletin of the Transilvania University of Brașov, Series VIII: Performing Arts, 13*(2-Suppl), 257-266.

Ryan, R. M., Deci, E. L., Vansteenkiste, M., & Soenens, B. (2021). Building a science of motivated persons: Self-determination theory's empirical approach to human experience and the regulation of behavior. *Motivation Science, 7*(2), 97.

Salas-Pilco, S. Z., Yang, Y., & Zhang, Z. (2022). Student engagement in online learning in Latin American higher education during the COVID-19 pandemic: A systematic review. *British Journal of Educational Technology, 53*(3), 593-619.

Strayhorn, T. L. (2018). *College students' sense of belonging: A key to educational success for all students.* Routledge. https://doi.org/10.4324/9781315297293

Tanvir, R. (2021). Factors increasing motivation of tertiary level learners' in-class participation. *Academy of Education and Social Sciences Review, 1*(1), 38-50.

Tasgin, A., & Tunc, Y. (2018). Effective participation and motivation: An investigation on secondary school students. *World Journal of Education, 8*(1), 58-74.

Ten, A., Kaushik, P., Oudeyer, P.Y., & Gottlieb, J. (2021). Humans monitor learning progress in curiosty-driven exploration. *Nature Communications, 12*(1), 5972.

Thararuedee, P., & Wette, R. (2020). Attending to learners' affective needs: Teachers' knowledge and practices. *System, 95*, 102375.

Trigueros, R., Aguilar-Parra, J. M., Cangas, A. J., Bermejo, R., Ferrandiz, C., & López-Liria, R. (2019). Influence of emotional intelligence, motivation and resilience on academic performance and the adoption of healthy lifestyle habits among adolescents. *International Journal of Environmental Research and Public Health, 16*(16), 2810.

Wang, M.T., & Eccles, J. S. (2012). Adolescent behavioral, emotional, and cognitive engagement trajectories in school and their differential relations to educational success. *Journal of Research on Adolescence, 22*(1), 31-39.

Woolfolk, A. (2015). *Eğitim psikolojisi (D. Özen, Trans.).* Kaknüs Yayınları.

Yun, S., Hiver, P., & Al-Hoorie, A. H. (2018). Academic buoyancy: Exploring learners' everyday resilience in the language classroom. *Studies in Second Language Acquisition, 40*(4), 805-830.

Zhang, X., Dai, S., & Ardasheva, Y. (2020). Contributions of (de) motivation, engagement, and anxiety to English listening and speaking. *Learning and Individual Differences, 79*, 101856.

Zhou, Z. (2022). Innovative learning environments for chorus conducting education. *Education and Information Technologies, 28*(2), 1-17. https://doi.org/10.1007/s10639-022-11503-9