A Project entitled

Investigating the self-efficacy of Hong Kong primary and secondary school students in symphonic band

Submitted by

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Declaration

I, *Tam Pui Ying Vivianne*, declare that this research report represents my own work under the supervision of *Mr. Yuen Tze Leung*, and that it has not been submitted previously for examination to any tertiary institution.

Signature: _____ _____

Abstract

This research is targeted for investigating the relationship between symphonic band participation and self-efficacy, to identify the differences between gender and band participation i.e. genders and years of band participation. The research is quantitative, with descriptive comparative. The samples contained 64 participants from primary and secondary school. The data were analysed by the application of descriptive statistics by calculating the mean and the percentage that exists in each category and t-test analysis. The research also showed a significant difference between female and male students' self-efficacy.

Due to limited research in this area, especially in the field of teaching of independent musicianship in large ensembles from Hong Kong, the paper reports the relationship of symphonic band participation and student's self-efficacy. The study enables to understand how symphonic band participation affects self-efficacy. There are lots of study related to the relationship between self-efficacy and academic achievement, also about relationship between self-efficacy, gender and symphonic band participation are limited.

Questionnaire is designed to employed as a major research too. There are two main research questions: 1) Is the gender of symphonic band participants and years of

participation in symphonic band having effects on self-efficacy? 2) What is the relationship between self-efficacy and participation of symphonic band?

A total of 64 symphonic band students from primary and secondary school are invited in this study. Years of band participation and learning instrument, grade of instrument and school recently studying were collected. Participants are required to score the degree by scrolling a number from 0 to 100 using the scale given. Question design was referred to General Self-Efficacy Scale (GSES) & Self-Efficacy Scale construction guide proposed by Albert Bandura. Different aspects are included: Musical Performance, Self-Regulated Learning, Extra-curricular Activities, Meet Others' Expectations, Enlisting Parental and Community Support, Academic Achievement, Social Self-Efficacy, Self-Assertive Efficacy, Career Development and Enlisting Social Resources.

Results showed that there is no big difference within gender and years of symphonic band participation, which has also no significant differences with symphonic band position. No matter it was more than senior year or junior year participation, senior groups' self-efficacy level in some areas were still higher than junior years band participants. It showed that students gave similar responses to self-efficacy items in terms of school studying, years of participation, or musical performance and social skills. The

study is only shown the possible relationship (symphonic band participation, self-efficacy). Non-symphonic band participants from primary and secondary schools are not focused and compared in this study.

Introduction

In Hong Kong primary and secondary schools, there are different kinds of music ensembles such as Western and Chinese orchestra, symphonic band. This provides opportunities for students to participate different kinds of musical activities such as rehearsals, performances, competitions, to experience music performance at a higher level. Some schools enable students participate different kinds of music competitions. There are many school symphonic bands that participated musical events, including the Hong Kong School Music Festival, Winter Band Festival, oversea wind band festival, annual concert, carnivals, “A band X’mas” presented by Hong Kong Wind Philharmonia, a 300-player concert held in Christmas. Some school have received numerous awards which attain a higher achievement and perform in international wind band festival.

In recent years, there are several band composers, conductors and music teachers make contributions to symphonic band in local schools. They influenced lots of band students in their musical knowledge, instrumental, performance and inter-personal skills.

For symphonic band participation, it helps to promote symphonic band music culture, enhance students in the field of music appreciation and achieve a higher standard of artistic excellence, especially for bands, students, music teachers, and their literature. By providing lessons for woodwind, brass and percussion instruments from professional musicians or music graduate of notable conservatory, it can help to nurture student's musical talents and perfecting the skills to members of the band.

In this research, it will be focused on symphonic band participation in primary and secondary sectors, to examine the relationship between symphonic band participation and self-efficacy. This research aims at finding out whether band participation can affect students' self-efficacy.

Self-efficacy means a set of beliefs that we had our ability to finish the task. It is a consequence of people' past experience and observation, communication, also with emotional reaction. It links to the ability to overcome difficulties as well as academic achievement. It is about a person's confidence in their ability to task completion or goal achievement, which developed by Albert Bandura in 1977.

Symphonic band education can be referred to a symphonic band that involved in

both primary and secondary sectors, which is an organization or an extra-curricular activity. It is under the leadership of conductors, music directors, music teachers or student management committees. Members of symphonic band are all students from their schools. Due to the limited research findings, especially in the area of teaching of independent musicianship in large ensembles from Hong Kong. Hope can make use of this opportunity to discover the relationship between symphonic band education and self-efficacy of students.

Two main research questions are been raised:

1. *Is the age of symphonic band participants and years of participation in symphonic band having effects on the level of self-efficacy?*
2. *What is the relationship between self-efficacy and participation of symphonic band?*

Literature Review

Self-Efficacy

Bandura (1977) defined self-efficacy which is about people's judgements of their abilities to organize and execute courses of action that necessary to attain specified types of performance. In this theory, it makes a difference of how people feel, think and act. Bandura (2011) also pointed out that students with high level of self-efficacy for specified

topic believes in his ability to complete a task, find correct answer, goal achievement. But a student with low self-efficacy on a particular topic who does not believe in his or her own ability will feel upset to task completion as he or she realizes that other people have an ability to conduct a task successfully which he or she considers too hard.

Self-efficacy influences the decision on students' activities selection (Raub & Liao, 2012). Students who have weak self-efficacy in learning aspect may try to avoid some learning tasks and difficult tasks. However, students who have high self-efficacy instantly are willing to complete learning tasks to get an excellent result. According to Schunk and Meece (2005), self-efficacy is related to the theoretical framework of social cognitive theory, which affects people's behavior and environments which one interacts, it is affected by people's actions and conditions.

In 1986 and 1997, Bandura pointed out that self-efficacy was the primary determinant of human behavior in his social cognitive theory. 4 areas that made a contribution to the development of self-efficacy:

(a) enactive mastery experience *(b) vicarious experience*

(c) physiological state *(d) verbal or social persuasion*

Self-efficacy is defined as an individual's belief in people's personal ability to perform behaviors which have an effect on learning, thoughts and emotional reactions. It controls how a person feel and judge and motivates people for action. It also affects whether or not a person will try certain behaviors. People with weak self-efficacy have lower aspirations and weaker commitment to goals. When deal with problems, people focus on their deficiencies and obstacles rather than focusing on how to complete the task successfully (Bandura, 1994).

Self-efficacy also refers to people's self-confidence in special tasks and situations (Boyd & Vozikis, 1994). It represents a person's personal abilities, skills, exposure, sound knowledge etc. It is about a particular task, which is according to an individual's self-perceptions for people's skills and abilities.

Self-efficacy is also defined as a person's judgement ability to conduct an action, which is found to be a reliable indicator of a wide variety of target directed behaviours (Bandura, 1987). The concept reflects a person's inner thoughts on whether he or she has abilities perceived as vital to task performance, and a belief that people will be able to effectively convert those skills into a chosen outcome (Bandura, 1989). It has been widely applied in the theory of career choice to express the perceived career choice and career

preferences (Betz and Hackett, 1981).

Referring to Bandura's research (1994), self-efficacy can be able to affect a person's way of judgment. People with weak ability of self-efficacy are always concern whether they got unsuccessfuk, care their thinking on personal defects and potential difficulties. Moreover, self-efficacy is also able to influence a person 's attribution method. Attribution is the reason of peoples' explanation and predict the results of people and their actions. People may consider success or failure to four sources: diligence, ability, luck, and difficulty. People with an excellent level of self-efficacy often think their failures related to his or her own effort. A person with weak ability of self-efficacy, often think failure to their own ability and talent is not fulfilled.

It also refers to believe on oneself to perform a task successfully, is found significantly explaining the difference in career choice. Some study shows that a person with abilities to start and control a business, working skills and business knowledge is more likely to opt for an entrepreneurial career. Supporting the previous studies (Bandura, 2001), the study shows that male and female have a strong effect on both entrepreneurial self-efficacy and career choice. Extended finding of this study is that females are less likely to choose an entrepreneurial career and also have less self-efficacy than males that

supports the findings of Chen (1998). Chowdhury and Endres (2005) revealed that female have both weak career self-efficacy and weak entrepreneurial intentions. The overall findings of this study showed that male respondents possess high achievement of self-efficacy than females, which are more likely to opt for an entrepreneurial career. Through this research, hope can find out the rate of the differences of gender from different perspectives. To demonstrate previous studies and have a new result on gender and self-efficacy.

Psychologist Albert Bandura proposed self-efficacy from the theory of social learning in 1982. Self-efficacy can be explained to the causes of motivation, which is a subjective assessment of a person's ability to conduct different aspects of a person's working ability. The results of the self-efficacy assessment will influence people's behavior and motivation. Once raising self-efficacy, many psychologists are interested in this item.

Bandura (1986) argues that the effects of the act does not only affect human behavior but also by the effect of behavioral outcomes and self-behavioral that are formed by human cognition. Bandura found that although people know that the specific behavior will cause some consequences, but it is not compulsory for them to

engage in this act or to continue an activity. In order to prove that people are able and have a confidence to implement action, these speculation and estimation processes are the performance of self-efficacy. Therefore, the effect of self-efficacy is mainly to control behavior and through behavioral regulation influence the behavioral results.

Bandura (1997) suggested self-efficacy can be able to affect people's decision on behavior. People with strong self-efficacy prefer to select the tasks that are depended on people's abilities, and people with weak self-efficacy on the contrary. The greater the self-efficacy of people in an aspect, the greater the possibility of success, and the more he or she will try to approach in these activities, the longer the period of the new act will be. If not, people will try to quit those activities that they think they cannot complete it and the persistence would be got worse.

There was some research which are related to self-efficacy and music achievement, some scales were applied for the evaluation. The Music Performance Self-Efficacy Scale (Zelenak, 2010) was created to evaluate four elements of self-efficacy within secondary school music students (e.g. grades 7-12, or aged 11-18) participating in symphonic band, string orchestra and chorus.

From the research conducted (Ifdil, I., Apriani, R., Yendi, F. M., & Bolo Rangka, I, 2016), female students are categorized as high, while male students is categorized as moderate. It can be seen that difference in the average of students' self-efficacy are both in female and male students.

Although some researchers (McCormick & McPherson, 2003) have examined the relationship between self-efficacy and music achievement, there have been a few studies related to self-efficacy and music aptitude. Such perspective can give extra understandings on the interaction of self-efficacy, aptitude, and music achievement. McPherson and McCormick (2000) discovered self-efficacy was to be the best predictor of performance achievement among students aged 9 to 18. From a different perspective, Fullen (1993) also found students with higher levels of music aptitude demonstrated higher levels of music performance achievement. These two researches raise questions regarding the relationship between self-efficacy and music aptitude and also students' effects on musical achievement.

Music education researchers have previously examined self-efficacy in music performance. McPherson and McCormick (2000) asked 349 students aged 9-18 who studied music to complete a self-report questionnaire before joining in a music

performance, which discover that performance self-efficacy dominated the largest rate of iten in each of three age groups:

Group A (N = Age 11.6) – 18%, Group B (N = Age 13.4) – 28%, Group C (N = Age 15.1 – 23%).

The finding revealed that self-efficacy of performance had a greater influence on music achievement than did self-regulation, general self-efficacy or intrinsic value.

Gender and Self-Efficacy

Regardless of academic achievement, based on a research by Sartini Nuryoto (1998), female students are better than male because female are more hard-working, they are willing to listen well. Female emotional attitude which is more important than the physical strength has put female in a very suitable position. Therefore, it is discovered that female students occupy the top ranks in their academics. Martono pointed out (2009) that female in general achieve better than male. Actually, female students perform better than male as female students are more motivated and diligent in completing school assignments, female's self-belief is also better than male, female likes having a comparison to male in reading (Santrock, 2012). In these researches, there is definitely a difference in the academic achievement of female and male. Instead of disovering the

difference in the academic achievement of both female and male students, other aspects on difference of gender were also found in the research findings conducted by Dinni Jufita Putri (2013), which demonstrated that in the subject of mathematics, self-efficacy of male is still higher than female students, which is an exceptional situation.

Gender and Self-Efficacy (Continued)

In fact, there are lots of evidences proposed that women are more likely to have weak expectations than men for success in different occupations (Eccles, 1994). Weak levels of self-efficacy among women have been found in careers historically defined as "nontraditional" (Bandura, 2001). Such differences also show in teenagers. A study on U.S. teenagers reveals that, though males and females have comparable levels of self-confidence, there are important gender differences in main areas (Marlino & Wilson, 2003). As the researches with adults, these gender differences are primarily discovered in fields that are stereotypically linked with "male" skills, including entrepreneurial careers or business. Apart from such findings on gender differences in self-efficacy, there is evidence to propose that women are more likely than men to limit their career targets as well as interests due to their beliefs that they are lacking in the necessary abilities (Bandura,1992). Some researchers have examined the correlation between gender, entrepreneurial self-efficacy as well as entrepreneurial intentions. They found that women

have both lower entrepreneurial intentions and lower entrepreneurial self-efficacy (Chowdhury & Endres, 2005). A research conducted by Marlino (2004) supported these researches by proving a relationship within self-efficacy and entrepreneurial preference in female teenagers.

Symphonic Band and Education

Benedict (2008) stated that symphonic bands are ensembles where, historically, director leadership is a kind of highly prized commodity, favoring decisive action given by external intelligence, which is a 'best practice' professionalism. Allsup & Prichard (2012) proposed that a similar model for large ensemble instruction that sequentially uses cognitive and performance modeling, independent practice to build student knowledge. For these models, increased student independence is a result of teacher instruction and monitoring. Symphonic band are called as wind ensemble, wind symphony, wind band and wind orchestras. A performing ensemble consisting of woodwinds, brass and percussion instruments players. There are different kinds of band such as military, professional, community as well as school bands.

According to Weidner (2015), symphonic band is a place for students, which is different and student-centerd, aims at developing independent musicianship and heighten

musicality. Music teachers have a responsibility to facilitate a rehearsal place for students and conductors expressing meanings and understanding of both the avenues in which important discourse frames subjective roles of musician, teacher and learner, and what music performing. Symphonic band is also a musical space. It helps to transfer music concepts and skills developed for a piece to long-term applications. Also, Berg stresses for conductor-educators to reject teacher-centered, authoritative approaches as well as instead promote musical thinking, critical listening and risk taking. Teaching with students is preferable than teaching to students. Allsup (2012) mentioned that the moral ends of public schooling aim at equipping with teenagers to develop independent thinking and actors, to free them from adults' care. Symphonic band is a good place for personal growth and moral practice. A student symphonic band education is defined "by the level in which he or she can achieve, recreate and refuse, which as a life and musical engagement. Band education emphasized student agency, critical thinking and self-directed music making as part of band director's teaching practice. Teacher is also aware of how students are taught in constructivist classroom. The teacher engaged in the learning process through teacher scaffolding, which relied on a good understanding of music concepts, practice and pedagogy, which is used to guide student-centered construction of knowledge and skills through active student engagement (Wiggins, 2015).

Scott (2011) suggested band education should be a constructivist learning design for

music is contingent on two components: teacher who offers instruction when students need some content knowledge and in conversation with students, offer educational environments where students can bring individual awareness to music and the step of musical performance.

Band education tends to be teacher-led and less student-led. Students should follow conductors and teachers' instruction. They are required to meet conductors and teachers' requirement. They need to have a strong understanding of conductors' suggestions and take an action to make an adjustment. Band environment is also the elements of band education. The band environment refers to band's physical and emotional space, created by music activities and interaction of teachers and students. The environment is musical, social and extramusical space. These elements are important in creating a successful band environment (Guss, 2015). Band is an extramusical space, which benefits musical development and general personal well-being (Weidner, 2015).

Kantorski (1995) categorized the contents of band education into several areas, including design of curriculum and teaching strategies, instrumental skills and techniques, rehearsal skills, performance practice, teacher education, selection of instrument and influence of band instruction on academics.

Enactive Mastery Experiences

Based on Bandura(1997), enactive mastery experience is defined as the successful performance of a task. As enactive mastery experience offers one of most authentic sources of evidence related to the ability of mastering a specific task in people, enactive mastery experiences are also the most important elements of efficacy details available to people. Successful completion is the element for increasing it. Student who got weak self-efficacy find it hard to overcome difficulties. Educators can create enactive mastery experiences by letting students to success at simple tasks. They can direct students through the specific tasks and guild students through enactive experiences. However, successful performance does not guarantee to enhance the level of self-efficacy. Student with low self-efficacy thinks success as an outcome of hard work rather than capacity. But student with high level of self-efficacy may view success as the result of capabilities (Smith, 2001).

Although many scholars do the research to demonstrate that self-efficacy could influence academic performance as well as shown the relationship between self-efficacy and gender, not many evidence and research shown the possible relationship within self-efficacy and music ensemble participation.

Methodology

The format of questionnaire is online, link is provided to participants. Personal background such as years of band participation, learning instrument, grade of instrument and school recently studying were collected. The data used to collect in this research was referred to General Self-Efficacy Scale (GSES) & Bandura's Self Efficacy Scale construction guide.

This questionnaire is a descriptive design. The study investigates and examines the relationship between self-efficacy and symphonic band participation. It tries to examine the links and interactions between items using quantitative methods. Scores of means were compared among the variables of gender, years of participation and position of symphonic band. The distribution and characteristic of scores will be shown and identify the differences.

The formation of the scale referred by Bandura's (2006) guidelines for evaluating self-efficacy. Researcher applied Bandura's recommendation, which applied a 1-to-100 numerical format, this can base on evidence of stronger inner consistency. The scale is not included negative numbers as negative gradations below the zero which cannot represent a level of activity and do not make sense.

The instruments were processed by descriptive statistics, determined the mean as well as standard deviation to calculate percentage in each section. In order to prove the research hypothesis in the differences of gender, symphonic band position, and years of symphonic band participation, t-test (Cronbach's Alpha) was applied. The data were analyzed by the software SPSS (Window 10 Version).

Data Collection Procedures

The researcher seek approval from the Education University of Hong Kong Human Research Ethics Committee. The packages contained a research document which were delivered to selected schools and participants. The researcher approached music teachers, school principals. This research included the introduction of research, an online consent form and the link of questionnaire. The research was introduced the objective, process as well as the confidentiality of the research to students. All students are voluntarily to fill the questionnaire. Participants were from different primary and secondary schools. The questionnaire was distributed in online format- "SurveyCake" platform, and website was provided. Participants are required to complete the battery of questionnaire in 15-20 minutes. All participants are required to fill a consent form online before entering to the questionnaire. Originally, it was planned to complete the form during class period in live

and paper format, due to recent convonvirus situation, all schools were suspended, and the research format changed to online mode. All questionnaires were collected directly from students after finished the survey and none of them asked to change his or her response after submitted the online form.

Sample

The sample included N=64 Symphonic Band students, n=59 for Secondary Students (92.2%) and n=5 for Primary Students (7.8%).

Questionnaire

The questionnaire is consisted of 2 sections, Section 1: Personal Particular; Section 2: Self-Efficacy Scale. Percentages were converted to numbers 0 to 100 for scoring purposes following the completion of the questionnaire.

In section 1, participants are required to provide demographic information, stated his or her gender, age ranges, schools studying, level of instruments, age of beginner, years of symphonic band participation and learning instruments, position of symphonic band (Members/Principals) and instrument played. Gender, symphonic position and years of symphonic band participation were used to classify participants for analysis.

In section 2, it covered different aspects, total 33 questions. It requires participant to score the level of confidence by recording a number from 0 to 100 using the scale provided: 0- 100, 0=Cannot do certain do at all, 50=moderately can do, 100= can certainly do. This section was evaluated in different areas, included musical performance, self-regulated learning, extra-curricular activities, social self-efficacy, enlisting parental and community support, self-assertive efficacy, academic achievement, career development, enlisting social resources as well as meet others' expectations.

Data Analysis

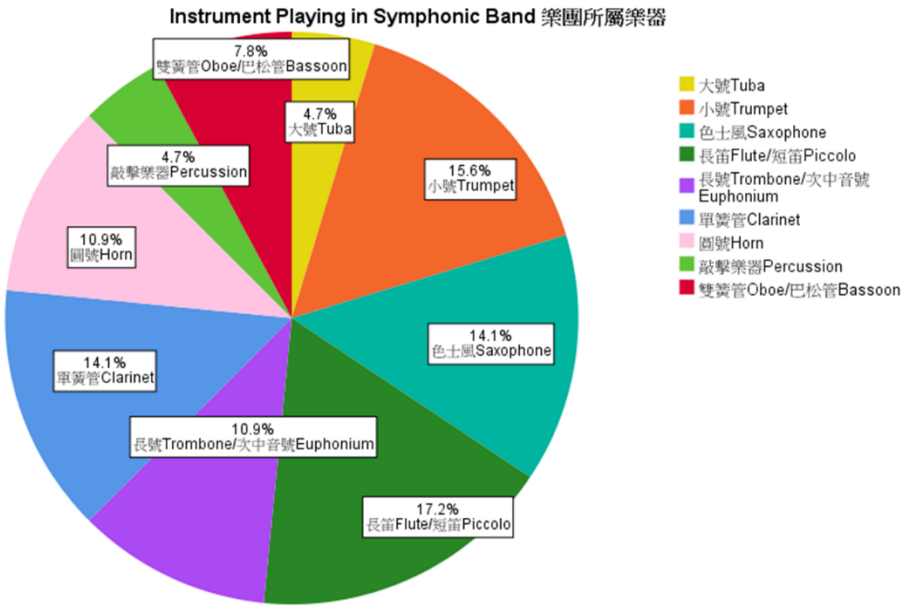
Participants included primary and secondary student from symphonic band. The result of research conducted by Ifdil, Rizka Apriani, Frischa Meivilona Yendi and Itsar Bolo Rangka (2016), showed that there are differences of students' self-efficacy in both genders. Data of primary and secondary school students and data of position of symphonic band were mainly focused.

Findings

There were total 64 of respondents from primary and secondary school students, which included 59 secondary school (92.2%) and 5 primary school (7.8%) from school of study, 50 members (78.1%) & 14 principals (21.9%) for symphonic band position.

There were 35 males (54.7%) and 29 females (45.7%). For years of symphonic band participation, there were 4 for 10 years or above (6.3%), 14 for 7-9 years (21.9%), 18 for 0-3 years (28.1%) and 28 for 4-6 years (43.8%). For instrument playing in the symphonic band, the most players are flute (17.2%), then trumpet (15.6%), saxophone and clarinet (14.1%) and 10.9% for trombone and euphonium, double reed instrument and tuba were the fewest (4.7%).

Graph 1: Instrument playing in symphonic band



Self-Efficacy in Musical Performance

For all participants, the highest mean score of the item was “I can achieve musical goals set by myself”, which was 68.64 of 100. The lowest score of items was “Compared with other members, I think I am a good player” (48.41 of 100). It implied that participants are not very confident on comparing with other members in the judgment of

good player.

Table 1: Descriptive Statistics of Self-Efficacy of Musical Performance for mean and Standard Deviation (All Participants)

	N	Minimum	Maximum	Mean	Std. Deviation
當我演奏樂器時, 我感到十分自信。 Feel confident in my ability to perform in my instrument.	64	12	100	65.50	18.165
我能夠達成自己定下的音樂目標。I can achieve musical goals set by myself.	64	23	100	68.64	16.141
我能夠解決音樂演奏上的困難。Solve any musical problem I encounter.	64	0	90	64.47	18.674
與其他同學相比, 我認為自己是最好的管樂團團員。 Compared with other members, I think I am a good player.	64	0	100	48.41	25.693

Gender and years of participation are compared in the data. The mean of male participants is higher than female in 3 items of musical performance. (68.03%- I can achieve musical goals set by myself, 66.83%- feel confident in my ability to perform in my instrument, 65.8%- solve any musical problem I encounter). The level of male in self-efficacy is higher than female in most of items. For 10 years symphonic band participants, they got the highest mean (72.25%) in the question of solving any musical problem by themselves, which implies that they have higher self-efficacy in musical performance. 7-9 years participants are also higher than the short period of participants.

Table 2,3&4: Descriptive Statistics of Self-Efficacy of Musical Performance for mean and Standard Deviation (Gender and Years of Participation)

	您的性別 Your gender?	N	Mean	Std. Deviation
當我演奏樂器時, 我感到十分自信。 Feel confident in my ability to perform in my instrument.	男 Male	35	66.83	18.513
	女 Female	29	63.90	17.927
我能夠達成自己定下的音樂目標。I can achieve musical goals set by myself.	男 Male	35	68.03	15.371
	女 Female	29	69.38	17.270
我能夠解決音樂演奏上的困難。Solve any musical problem I encounter.	男 Male	35	65.80	17.129
	女 Female	29	62.86	20.579
與其他同學相比, 我認為自己是最好的管樂團團員。Compared with other members, I think I am a good player.	男 Male	35	47.03	23.993
	女 Female	29	50.07	27.946

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
當我演奏樂器時, 我感到十分自信。 Feel confident in my ability to perform in my instrument.	0-3 years	18	62.17	15.572
	4-6 years	28	70.36	16.696
我能夠達成自己定下的音樂目標。I can achieve musical goals set by myself.	0-3 years	18	66.67	15.830
	4-6 years	28	70.11	15.831
我能夠解決音樂演奏上的困難。Solve any musical problem I encounter.	0-3 years	18	64.61	16.783
	4-6 years	28	64.11	17.685
與其他同學相比, 我認為自己是最好的管樂團團員。Compared with other members, I think I am a good player.	0-3 years	18	50.06	28.131
	4-6 years	28	47.64	25.074

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
當我演奏樂器時, 我感到十分自信。 Feel confident in my ability to perform in my instrument.	7-9 years	14	59.43	23.602
	10 years or above	4	67.75	12.920
我能夠達成自己定下的音樂目標。I can achieve musical goals set by myself.	7-9 years	14	68.79	19.601
	10 years or above	4	66.75	9.069
我能夠解決音樂演奏上的困難。Solve any musical problem I encounter.	7-9 years	14	62.79	25.314
	10 years or above	4	72.25	6.344
與其他同學相比, 我認為自己是最好的管樂團團員。Compared with other members, I think I am a good player.	7-9 years	14	46.79	27.271
	10 years or above	4	52.00	21.119

Self-Efficacy in Enlisting Social Resources

Overall, the highest mean of this category is "Getting friend to help me when I have any problems" (79.92%). It implied that most participants prefer to get help from their friends, rather than finding their teachers and classmates.

For gender, the means of female are higher than male in general, showing that more

females are willing to find help from teachers, classmates and friends. For years of participation, 0-3 years and 4-6 years groups prefer to seek help of schoolwork from teachers. 7-9 years and 10 years or above' group are likely to seek help from classmates and friends for any problems.

Self-Efficacy for Leisure Time Skills and Extracurricular Activities

The mean of "Doing the things needed to serve in school" is the highest, which is 75.52%, implied that many participants prefer to join school activities, rather than joining drama (22.2%) and sports activities (53.48%).

Table 5: Descriptive Statistics of Self-Efficacy for Leisure Time Skills and Extracurricular Activities for mean and Standard Deviation (All Participants)

	N	Minimum	Maximum	Mean	Std. Deviation
參與校內活動。Do the things needed to serve in school.	64	0	100	75.52	20.572
參與學校戲劇。Do the kinds of things needed to take part in school plays.	64	0	100	22.22	29.875
定期參與體育活動。Do regular physical education activities.	64	0	100	53.48	32.441

Table 6: Descriptive Statistics of Self-Efficacy for Leisure Time Skills and Extracurricular Activities for mean and Standard Deviation (Category of Genders)

	您的性別 Your gender?	N	Mean	Std. Deviation
參與校內活動。Do the things needed to serve in school.	男 Male	35	71.11	22.439
	女 Female	29	80.83	16.952
參與學校戲劇。Do the kinds of things needed to take part in school plays.	男 Male	35	15.03	27.713
	女 Female	29	30.90	30.543
定期參與體育活動。Do regular physical education activities.	男 Male	35	54.14	34.287
	女 Female	29	52.69	30.647

At the same time, more female participants prefer to join different kinds of activities than male. 80.83% (Female) and 71.11% (Male) for the item "Do the things needed to serve in school". 30.9% (Female) and 15.03% (Male) for the item "Do the kinds of things needed to take part in school plays".

All groups of years participation have a high mean on the categories of "Prefer to join school activities": 0-3 years: 77.17%, 4-6 years: 74.11%, 7-9 years: 76%, 10 years of above: 76.25%.

Table 7&8: Descriptive Statistics of Self-Efficacy for Leisure Time Skills and Extracurricular Activities for mean and SD (Category of Years of Symphonic Band Participation- 0-3 years, 4-6 years, 7-9years, 10 years or above)

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
參與校內活動。Do the things needed to serve in school.	0-3 years	18	77.17	19.346
	4-6 years	28	74.11	18.009
參與學校戲劇。Do the kinds of things needed to take part in school plays.	0-3 years	18	29.11	30.636
	4-6 years	28	21.71	31.216
定期參與體育活動。Do regular physical education activities.	0-3 years	18	53.22	29.174
	4-6 years	28	61.29	29.472

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
參與校內活動。Do the things needed to serve in school.	7-9 years	14	76.00	26.981
	10 years or above	4	76.25	25.617
參與學校戲劇。Do the kinds of things needed to take part in school plays.	7-9 years	14	12.36	24.982
	10 years or above	4	29.25	33.797
定期參與體育活動。Do regular physical education activities.	7-9 years	14	40.71	37.985
	10 years or above	4	44.75	42.153

Self-Efficacy for Career Development

The means of all item are near 50%, in which participants are not willing to approach music industry in the future. (40.73%- Apply for music-related job, 47.53%- Want to be a musician in the future, 51.13%- Feeling clear on the path of career goal).

Table 9: Descriptive Statistics of Career Development for All Participants

	N	Minimum	Maximum	Mean	Std. Deviation
未來想成為音樂家。Want to be a musician in the future.	64	0	100	47.53	33.260
想申請除音樂家、音樂老師以外的音樂相關職位。Want to apply for music-related job positions other than musician, music teacher.	64	0	100	40.73	28.753
清晰的目標職業。Feeling clear on the path of career goal.	64	0	100	51.13	33.029

Despite this below average mean, more females prefer to have a clear goal in their career and apply for music related jobs in the future than male. Except the goal of becoming a musician (Male: 49.74%, Female: 44.86%).

For years of participation, 10 years or above group has the highest mean of career development, especially becoming a musician in the future (61.25%) and applying music-related jobs (67.25%).

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
未來想成為音樂家。Want to be a musician in the future.	0-3 years	18	40.00	30.577
	4-6 years	28	48.46	31.819
想申請除音樂家、音樂老師以外的音樂相關職位。Want to apply for music-related job positions other than musician, music teacher.	0-3 years	18	45.22	31.505
	4-6 years	28	34.89	24.557
清晰的目標職業。Feeling clear on the path of career goal.	0-3 years	18	54.33	30.671
	4-6 years	28	48.82	34.814

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
未來想成為音樂家。Want to be a musician in the future.	7-9 years	14	51.43	38.062
	10 years or above	4	61.25	43.277
想申請除音樂家、音樂老師以外的音樂相關職位。Want to apply for music-related job positions other than musician, music teacher.	7-9 years	14	39.07	32.164
	10 years or above	4	67.25	20.903
清晰的目標職業。Feeling clear on the path of career goal.	7-9 years	14	51.36	38.056
	10 years or above	4	52.00	16.813

Table 10&11: Descriptive Statistics of Career Development for different year groups

Social Self-Efficacy

The highest mean of items is making and keeping friends of same gender (83.41%), which implies that most participants prefer to meet same gender friend, comparing with opposite gender. Another social skill i.e. conversation (77.61%) and work with group (74.47%) are also preferred.

For analysis of gender, the highest mean score of the item is “Make and keep friends of the same gender” (Male: 81.31%, Female: 85.93%). All genders prefer to meet friends in same gender and communicate with others. However, the item of make friends in opposite gender is not high, which is 52.63% for male and 56.86 % for female.

For years of participation, 10 years or above group has the highest mean score in making friends in opposite (74.75%) and same gender (97.5%), talking with others continuously (90.0%). Fewer year participants have a lower score in making friends of opposite gender: (0-3 years: 53.94%, 4-6 years: 50.71%).

Table 12&13: Descriptive Statistics of Social Self-Efficacy for different year groups

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
結交異性朋友。Make and keep friends of the opposite gender.	0-3 years	18	53.94	21.317
	4-6 years	28	50.71	31.218
結交同性朋友。Make and keep friends of the same gender.	0-3 years	18	83.56	15.986
	4-6 years	28	80.04	18.273
繼續與其他人交談。Carry on conversations with others.	0-3 years	18	74.67	19.728
	4-6 years	28	73.96	21.721
在一個小組中很好地工作。Work well in a group.	0-3 years	18	76.39	16.063
	4-6 years	28	70.29	19.524

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
結交異性朋友。Make and keep friends of the opposite gender.	7-9 years	14	57.21	28.943
	10 years or above	4	74.75	25.369
結交同性朋友。Make and keep friends of the same gender.	7-9 years	14	85.93	11.790
	10 years or above	4	97.50	5.000
繼續與其他人交談。Carry on conversations with others.	7-9 years	14	85.14	25.946
	10 years or above	4	90.00	20.000
在一個小組中很好地工作。Work well in a group.	7-9 years	14	80.93	10.528
	10 years or above	4	72.50	20.616

Self-Assertive Efficacy

All participants have high mean score in expressing opinions in different situations Two items are very near in the mean score. (70.58%- Express my opinions in different situations, 69.48%- Stand up for myself when I feel I am being treated unfairly). It implied that participants may express what they think and willing to communicate with others in any problems of symphonic band, such as music practice, rehearsal times etc.

For gender aspect, male is higher than female in both items of expressing opinions, which means male would more bravely than female. When having any problems about rehearsals, musical ideas, male would prefer express first.

Table 14&15: Descriptive Statistics of Self-Assertive Efficacy for All participants and gender

	Minimum	Maximum	Mean	Std. Deviation
當其他同學不同意我的意見時，會表達我的意見。Express my opinions when other classmates disagree with me	0	100	70.58	20.312
當我感到不公平對待, 會站起來為自己表達。Stand up for myself when I feel I am being treated unfairly.	0	100	69.48	23.108

	您的性別 Your gender?	N	Mean
當其他同學不同意我的意見時，會表達我的意見。Express my opinions when other classmates disagree with me	男 Male	35	71.06
	女 Female	29	70.00
當我感到不公平對待, 會站起來為自己表達。Stand up for myself when I feel I am being treated unfairly.	男 Male	35	72.66
	女 Female	29	65.66

Senior years group have higher mean score than junior and middle year group in both items, which implies that senior band participants have more intentions to express

their ideas. Especially taking care of junior symphonic band students, they would like to provide help during rehearsals or performances.

Table 16&17: Descriptive Statistics of Self-Assertive Efficacy for years of symphonic band participation

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
當其他同學不同意我的意見時，會表達我的意見。Express my opinions when other classmates disagree with me	0-3 years	18	62.67	17.895
	4-6 years	28	72.07	17.837
當我感到不公平對待, 會站起來為自己表達。Stand up for myself when I feel I am being treated unfairly.	0-3 years	18	56.67	22.189
	4-6 years	28	74.18	17.866

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
當其他同學不同意我的意見時，會表達我的意見。Express my opinions when other classmates disagree with me	7-9 years	14	75.64	26.167
	10 years or above	4	78.00	20.720
當我感到不公平對待, 會站起來為自己表達。Stand up for myself when I feel I am being treated unfairly.	7-9 years	14	75.21	28.623
	10 years or above	4	74.25	25.012

Reliability for a battery of questionnaire and self-efficacy items

Reliability analyses were conducted to assess the reliability of whole questionnaire, included participants' demographic information and self-efficacy evaluated items. This can help to make sure the data is reliable despite the recent class suspension situation. Cronbach's Alpha was applied in assessment of reliability. It revealed that the questionnaire is reliable (α=.864- Whole Questionnaire, α=.867- Self-Efficacy Items)

Table 18&19: T-test for whole questionnaire and self-efficacy items

Whole Quesionnaire

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.864	.855	38

Self-Efficacy Items

Cronbach's Alpha	N of Items
.867	33

All p values are higher than 0.05 (p>0.05) which have no statistically significant difference.

Table 20&21: T-test for Academic Performance (Principal and Members, Genders)

Groups	Items	Mean	SD	T value	P Value	Groups	Items	Mean	SD	T value	P Value
首席 Principal	當我遇到功課上的問題, 會尋求老師協助。 Get teachers to help me when I get stuck on schoolwork.	49.29	30.45	-.869	.395	Male	當我遇到功課上的問題, 會尋求老師協助。 Get teachers to help me when I get stuck on schoolwork.	50.17	28.29	-1.67	.099
成員 Member		57.12	27.36			Female		61.72	26.79		
首席 Principal	當我遇到學校上的問題, 會尋求同學協助。Get classmates to help me when I get stuck on schoolwork	71.71	19.29	-.500	.621	Male	當我遇到學校上的問題, 會尋求同學協助。Get classmates to help me when I get stuck on schoolwork	71.91	24.69	-.859	.394
成員 Member		74.80	24.00			Female		76.79	20.75		
首席 Principal	當我遇到任何困難, 會找朋友幫忙。Get friend to help me when I have any problems.	76.07	18.96	-.818	.423	Male	當我遇到任何困難, 會找朋友幫忙。Get friend to help me when I have any problems.	78.49	19.62	-.586	.560
成員 Member		80.74	18.56			Female		81.21	17.50		
首席 Principal	學習閱讀，寫作和語言技能。Learn reading, writing, and language skills.	64.79	20.07	-.586	.565	Male	學習閱讀，寫作和語言技能。Learn reading, writing, and language skills.	64.91	21.29	-1.121	.231
成員 Member		68.32	19.58			Female		70.72	17.13		
首席 Principal	學習外語。Learn a foreign language.	45.50	28.89	-1.82	.085	Male	學習外語。Learn a foreign language.	50.91	28.87	-2.41	.019
成員 Member		60.88	24.11			Female		65.48	19.09		

All p values are higher than 0.05 (p>0.05), which have no statistically significant difference. Except learning foreign language, all p values are higher than 0.05 (p>0.05) no statistically significant difference.

Table 22: T-test for Leisure Time Skills and Extracurricular Activities (Genders)

Groups	Items	Mean	SD	T value	P Value
Male	參與校內活動。Do the things needed to serve in school.	71.11	22.44	-1.97	.053
Female		80.83	16.95		
Male	參與學校戲劇。Do the kinds of things needed to take part in school plays.	15.03	27.71	.2.16	.035
Female		30.90	30.54		
Male	定期參與體育活動。Do regular physical education activities.	54.14	34.29	.179	.859
Female		52.69	30.65		

The p values are lower than 0.05 (p<0.05) in joining drama, which statistically significant difference was existed for male and female.

Groups	Items	Mean	SD	T value	P Value
首席 Principal	結交異性朋友。Make and keep friends of the opposite gender..	61.00	27.37	.993	.332
成員 Member		52.74	28.04		
首席 Principal	結交同性朋友。Make and keep friends of the same gender.	79.71	19.22	-.848	.407
成員 Member		84.44	15.25		
首席 Principal	繼續與其他人交談。Carry on conversations with others.	78.93	28.45	.207	.838
成員 Member		77.24	20.55		
首席 Principal	在一個小組中很好地工作。Work well in a group.	78.79	15.08	1.166	.255
成員 Member		73.26	17.65		
首席 Principal	當我感到不公平對待, 會站起來為自己表達。Stand up for myself when I feel I am being treated unfairly.	69.93	22.46	.083	.935
成員 Member		69.36	23.51		

Table 23: T-test for Social Skills (Principal and Members)

All p values are higher than 0.05 (p>0.05) no statistically significant difference. It implies that principals and members can all have social skills, to meet different background of friends.

Table 24: T-test for Career Development (Principal and Members)

Groups	Items	Mean	SD	T value	P Value
首席 Principal	未來想成為音樂家。Want to be a musician in the future.	54.57	37.57	.818	.424
成員 Member		45.56	32.09		
首席 Principal	想申請除音樂家、音樂老師以外的音樂相關職位。Want to apply for music-related job positions other than musician, music teacher.	37.14	29.28	-.521	.608
成員 Member		41.74	28.82		
首席 Principal	清晰的目標職業。Feeling clear on the path of career goal.	54.93	27.56	.551	.587
成員 Member		50.06	34.58		

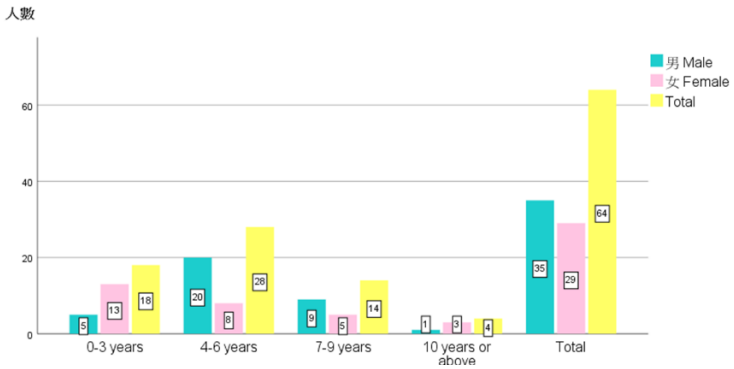
All p values are higher than 0.05 (p>0.05) no statistically significant difference, which means principals and members have no difference, both have same beliefs and judgments for their career aspects. Reflects that each position is not the factor of the setting goals of music career.

Research Question 1

Is the gender of symphonic band participants and years of participation in symphonic band having effects on the level of self-efficacy?

For gender, female's score is higher than male in most of self-efficacy part. Female have a higher self-efficacy than male when they participate symphonic band. Most items showed a higher score compared with male. Especially a goal of being musician, which is the only part which male's score is higher than female. Many factors affect the level of student's self-efficacy such as culture and gender (Bandura, 2002). Gender affects self-efficacy which female students have higher self-efficacy in the judgment of their roles.

Graph 2: Gender of Symphonic Band Participants (Include Both genders)



Male participants are more than female in overall. (35 females: 29 males), while female is more than male in junior year group. For middle (4-6 years) and senior year groups (10 years or above), male is still more than female (30 males vs 16 females).

Career Development

Despite this below average mean, more female prefers to have a clear goal in their career and apply for music-related jobs in the future than male. Except the goal of becoming a musician (Male: 49.74%, Female: 44.86%). Based on the result, it can be reflected that female symphonic participants are likely to have a clear career goal in spite of moderate mean score.

Table 25: Descriptive Statistics of Mean and Standard Deviation for Career Development-Gender

	您的性別 Your gender?	N	Mean	Std. Deviation
未來想成為音樂家。Want to be a musician in the future.	男 Male	35	49.74	33.926
	女 Female	29	44.86	32.833
想申請除音樂家、音樂老師以外的音樂相關職位。Want to apply for music-related job positions other than musician, music teacher.	男 Male	35	36.20	27.554
	女 Female	29	46.21	29.691
清晰的目標職業。Feeling clear on the path of career goal.	男 Male	35	46.54	35.102
	女 Female	29	56.66	30.009

Social Self-Efficacy

In this category, the highest mean score is the item of "Make and keep friends of the same gender" (Male: 81.31%, Female: 85.93%). It revealed that both genders prefer to meet new friends in same gender during the process of joining symphonic band.

Table 26: Descriptive Statistics of Mean and Standard Deviation for Social Self-Efficacy-Gender

	您的性別 Your gender?	N	Mean	Std. Deviation
結交異性朋友。Make and keep friends of the opposite gender.	男 Male	35	52.63	30.262
	女 Female	29	56.86	25.064
結交同性朋友。Make and keep friends of the same gender.	男 Male	35	81.31	17.645
	女 Female	29	85.93	14.041
繼續與其他人交談。Carry on conversations with others.	男 Male	35	77.51	21.485
	女 Female	29	77.72	23.564
在一個小組中很好地工作。Work well in a group.	男 Male	35	74.23	18.798
	女 Female	29	74.76	15.273

Self- Regulated Learning

Table 27: Descriptive Statistics of Mean and Standard Deviation for Self- Regulated Learning- Gender

	您的性別 Your gender?	N	Mean	Std. Deviation
當我遇到功課上的問題, 會尋求老師協助。Get teachers to help me when I get stuck on schoolwork.	男 Male	35	50.17	28.290
	女 Female	29	61.72	26.787
當我遇到學校上的問題, 會尋求同學協助。Get classmates to help me when I get stuck on schoolwork	男 Male	35	71.91	24.694
	女 Female	29	76.79	20.751
當我遇到任何困難, 會找朋友幫忙。Get friend to help me when I have any problems.	男 Male	35	78.49	19.620
	女 Female	29	81.21	17.500

The means of female are higher than male in solving problem getting help from others, showing that more females are willing to find help from teachers, classmates and friends, if they got any troubles on assignment, other problems.

Extra-curricular Activities

Table 28: Descriptive Statistics of Mean and Standard Deviation for Extra-curricular Activities- Gender

	您的性別 Your gender?	N	Mean	Std. Deviation
參與校內活動。Do the things needed to serve in school.	男 Male	35	71.11	22.439
	女 Female	29	80.83	16.952
參與學校戲劇。Do the kinds of things needed to take part in school plays.	男 Male	35	15.03	27.713
	女 Female	29	30.90	30.543
定期參與體育活動。Do regular physical education activities.	男 Male	35	54.14	34.287
	女 Female	29	52.69	30.647

More female participants prefer to join different kinds of activities than male. It showed that females are willing to join other activities, after joining symphonic band.

Musical Performances

Table 29: Descriptive Statistics of Mean and Standard Deviation for Musical Performances- Gender

	您的性別 Your gender?	N	Mean	Std. Deviation
當我演奏樂器時, 我感到十分自信。 Feel confident in my ability to perform in my instrument.	男 Male	35	66.83	18.513
	女 Female	29	63.90	17.927
我能夠達成自己定下的音樂目標。I can achieve musical goals set by myself.	男 Male	35	68.03	15.371
	女 Female	29	69.38	17.270
我能夠解決音樂演奏上的困難。Solve any musical problem I encounter.	男 Male	35	65.80	17.129
	女 Female	29	62.86	20.579
與其他同學相比, 我認為自己是最好的管樂團團員。Compared with other members, I think I am a good player.	男 Male	35	47.03	23.993
	女 Female	29	50.07	27.946

The level of male in musical performances is higher than female, the mean of male participants is higher than female in 2 items of musical performance. (68.03%, 66.83%, 65.8%).

For years of participation, all years of participation' groups have a moderate score on each item in self-efficacy. Especially in senior years group, they may have a strong motivation on their social skills, problem solving, career development and expressing opinions, as they have more experiences on rehearsals and performances. In junior and middle year group, academic achievement item has the only higher score, comparing with senior band students, which means some excellent student would join symphonic band.

Career Achievement

10 years or above group has the highest mean of career development. Especially becoming a musician in the future (61.25%) and applying music-related jobs (67.25%). As they have more experiences in symphonic band, they may have a strong interest in music and their instrument, which affect them to apply music programs or other studies.

Table 30&31: Descriptive Statistics of Mean and Standard Deviation for Career Achievement-Years of participation

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
未來想成為音樂家。Want to be a musician in the future.	0-3 years	18	40.00	30.577
	4-6 years	28	48.46	31.819
想申請除音樂家、音樂老師以外的音樂相關職位。Want to apply for music-related job positions other than musician, music teacher.	0-3 years	18	45.22	31.505
	4-6 years	28	34.89	24.557
清晰的目標職業。Feeling clear on the path of career goal.	0-3 years	18	54.33	30.671
	4-6 years	28	48.82	34.814

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
未來想成為音樂家。Want to be a musician in the future.	7-9 years	14	51.43	38.062
	10 years or above	4	61.25	43.277
想申請除音樂家、音樂老師以外的音樂相關職位。Want to apply for music-related job positions other than musician, music teacher.	7-9 years	14	39.07	32.164
	10 years or above	4	67.25	20.903
清晰的目標職業。Feeling clear on the path of career goal.	7-9 years	14	51.36	38.056
	10 years or above	4	52.00	16.813

Self- Assertive Efficacy

Senior year group have higher mean score than junior and middle year group in both items. Implies that senior band participants have more intentions to express their ideas. As senior band participants have more experiences, they will have more chances to express and enhance their communication skills through the activity.

Table 32&33: Descriptive Statistics of Mean and Standard Deviation for Self- Assertive Efficacy -Years of participation

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
當其他同學不同意我的意見時，會表達我的意見。Express my opinions when other classmates disagree with me	0-3 years	18	62.67	17.895
	4-6 years	28	72.07	17.837
當我感到不公平對待, 會站起來為自己表達。Stand up for myself when I feel I am being treated unfairly.	0-3 years	18	56.67	22.189
	4-6 years	28	74.18	17.866

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
當其他同學不同意我的意見時，會表達我的意見。Express my opinions when other classmates disagree with me	7-9 years	14	75.64	26.167
	10 years or above	4	78.00	20.720
當我感到不公平對待, 會站起來為自己表達。Stand up for myself when I feel I am being treated unfairly.	7-9 years	14	75.21	28.623
	10 years or above	4	74.25	25.012

Enlisting Social Resources

The 0-3 years and 4-6 years groups prefer to seek help of schoolwork from teachers. 7-9 years and 10 years or above' group are likely to seek help from classmates and friends for any problems

Table 34&35: Descriptive Statistics of Mean and Standard Deviation for Enlisting Social Resources -Years of Participation

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
當我遇到功課上的問題, 會尋求老師協助。 Get teachers to help me when I get stuck on schoolwork.	0-3 years	18	60.61	28.669
	4-6 years	28	58.21	28.278
當我遇到學校上的問題, 會尋求同學協助。Get classmates to help me when I get stuck on schoolwork	0-3 years	18	78.61	18.134
	4-6 years	28	66.86	28.010
當我遇到任何困難, 會找朋友幫忙。Get friend to help me when I have any problems.	0-3 years	18	82.67	14.556
	4-6 years	28	78.89	22.275

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
當我遇到功課上的問題, 會尋求老師協助。 Get teachers to help me when I get stuck on schoolwork.	7-9 years	14	45.36	24.821
	10 years or above	4	47.50	34.034
當我遇到學校上的問題, 會尋求同學協助。Get classmates to help me when I get stuck on schoolwork	7-9 years	14	80.36	13.882
	10 years or above	4	83.00	19.900
當我遇到任何困難, 會找朋友幫忙。Get friend to help me when I have any problems.	7-9 years	14	78.07	16.982
	10 years or above	4	78.00	16.411

Social Self- Efficacy

10 years or above group has the highest mean score in making friends in opposite (74.75%) and same gender (97.5%), talking with others continuously (90.0%)

Fewer year participants have a lower score in making friends of opposite gender 0-3 years: 53.94%, 4-6 years: 50.71%).

Table 36&37: Descriptive Statistics of Mean and Standard Deviation for Social Self-Efficacy -Years of participation

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
結交異性朋友。Make and keep friends of the opposite gender.	0-3 years	18	53.94	21.317
	4-6 years	28	50.71	31.218
結交同性朋友。Make and keep friends of the same gender.	0-3 years	18	83.56	15.986
	4-6 years	28	80.04	18.273
繼續與其他人交談。Carry on conversations with others.	0-3 years	18	74.67	19.728
	4-6 years	28	73.96	21.721
在一個小組中很好地工作。Work well in a group.	0-3 years	18	76.39	16.063
	4-6 years	28	70.29	19.524

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
結交異性朋友。Make and keep friends of the opposite gender.	7-9 years	14	57.21	28.943
	10 years or above	4	74.75	25.369
結交同性朋友。Make and keep friends of the same gender.	7-9 years	14	85.93	11.790
	10 years or above	4	97.50	5.000
繼續與其他人交談。Carry on conversations with others.	7-9 years	14	85.14	25.946
	10 years or above	4	90.00	20.000
在一個小組中很好地工作。Work well in a group.	7-9 years	14	80.93	10.528
	10 years or above	4	72.50	20.616

Musical Performances

Table 38&39: Descriptive Statistics of Mean and Standard Deviation for Musical Performances -Years of participation

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
當我演奏樂器時, 我感到十分自信。 Feel confident in my ability to perform in my instrument.	0-3 years	18	62.17	15.572
	4-6 years	28	70.36	16.696
我能夠達成自己定下的音樂目標。I can achieve musical goals set by myself.	0-3 years	18	66.67	15.830
	4-6 years	28	70.11	15.831
我能夠解決音樂演奏上的困難。Solve any musical problem I encounter.	0-3 years	18	64.61	16.783
	4-6 years	28	64.11	17.685
與其他同學相比, 我認為自己是最好的管樂團團員。Compared with other members, I think I am a good player.	0-3 years	18	50.06	28.131
	4-6 years	28	47.64	25.074

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
當我演奏樂器時, 我感到十分自信。 Feel confident in my ability to perform in my instrument.	7-9 years	14	59.43	23.602
	10 years or above	4	67.75	12.920
我能夠達成自己定下的音樂目標。I can achieve musical goals set by myself.	7-9 years	14	68.79	19.601
	10 years or above	4	66.75	9.069
我能夠解決音樂演奏上的困難。Solve any musical problem I encounter.	7-9 years	14	62.79	25.314
	10 years or above	4	72.25	6.344
與其他同學相比, 我認為自己是最好的管樂團團員。Compared with other members, I think I am a good player.	7-9 years	14	46.79	27.271
	10 years or above	4	52.00	21.119

For 10 years symphonic band participants, they got the highest mean (72.25%) in the question of solving any musical problem by themselves. Implies they have higher self-efficacy in musical performance. 7-9 years participants are also higher than the short period of participants.

Extra-Curricular Activities

All groups of years prefer to join school activities, 0-3 years: 77.17%, 4-6 years: 74.11%, 7-9 years: 76%, 10 years of above: 76.25%. The mean score is moderately high, except joining dramatic activities. It seems that students may not have a strong interest and learning motivation in drama.

Table 40&41: Descriptive Statistics of Mean and Standard Deviation for Extra-Curricular Activities -Years of participation

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
參與校內活動。Do the things needed to serve in school.	0-3 years	18	77.17	19.346
	4-6 years	28	74.11	18.009
參與學校戲劇。Do the kinds of things needed to take part in school plays.	0-3 years	18	29.11	30.636
	4-6 years	28	21.71	31.216
定期參與體育活動。Do regular physical education activities.	0-3 years	18	53.22	29.174
	4-6 years	28	61.29	29.472

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
參與校內活動。Do the things needed to serve in school.	7-9 years	14	76.00	26.981
	10 years or above	4	76.25	25.617
參與學校戲劇。Do the kinds of things needed to take part in school plays.	7-9 years	14	12.36	24.982
	10 years or above	4	29.25	33.797
定期參與體育活動。Do regular physical education activities.	7-9 years	14	40.71	37.985
	10 years or above	4	44.75	42.153

Research Question 2

What is the relationship between participation of symphonic band and self-efficacy?

According to previous research, self-efficacy of music performance has been shown to play a significant role in music education. Existing studies have defined self-efficacy as the best predictor of music performance achievement when compared to general self-efficacy, self-regulation and intrinsic value, (McCormick & McPherson, 2003). Self-efficacy was also determined as a balancing variable between different variables such as formal practice and the outcome item of performance achievement (McPherson & McCormick, 2006). Bandura (1997) also pointed out that mastery experiences were the most useful as well as a perfection to develop self-efficacy. Symphonic band is a type of mastery experience, which includes regular rehearsals, music performances and competitions. These experiences can help students to build up their musical knowledge

and enrich their musical experiences. Yet, symphonic band students may face many difficulties while their practices, but most of students may have a strong motivation on their social, academic and musical performance in self- efficacy. For example, some students are outstanding on their academic performance and they are still committed to join symphonic band and represent the school to attend the music competition and responsible for specific part such as solo or section leader, despite they have to prepare for public exam. As a result, senior years band participants have a higher score on their self-evaluation in different parts.

Table 42&43: Descriptive Statistics of Mean and Standard Deviation for Social Self-Efficacy -Years of participation

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
結交異性朋友。Make and keep friends of the opposite gender.	0-3 years	18	53.94	21.317
	4-6 years	28	50.71	31.218
結交同性朋友。Make and keep friends of the same gender.	0-3 years	18	83.56	15.986
	4-6 years	28	80.04	18.273
繼續與其他人交談。Carry on conversations with others.	0-3 years	18	74.67	19.728
	4-6 years	28	73.96	21.721
在一個小組中很好地工作。Work well in a group.	0-3 years	18	76.39	16.063
	4-6 years	28	70.29	19.524

	參與管樂團年資 Years of symphonic band participation:	N	Mean	Std. Deviation
結交異性朋友。Make and keep friends of the opposite gender.	7-9 years	14	57.21	28.943
	10 years or above	4	74.75	25.369
結交同性朋友。Make and keep friends of the same gender.	7-9 years	14	85.93	11.790
	10 years or above	4	97.50	5.000
繼續與其他人交談。Carry on conversations with others.	7-9 years	14	85.14	25.946
	10 years or above	4	90.00	20.000
在一個小組中很好地工作。Work well in a group.	7-9 years	14	80.93	10.528
	10 years or above	4	72.50	20.616

For the social self-efficacy, 10 years or above group has the highest mean score in making friends in opposite (74.75%) and same gender (97.5%), talking with others continuously (90.0%). Less year participants have lower score in making friends of

opposite gender (0-3 years: 53.94%, 4-6 years: 50.71%.

Position of Symphonic Band

Table 44&45: Descriptive Statistics of Mean and Standard Deviation for Career Development and Music Performance- Position of Symphonic Band

	樂團位置 Position :	N	Mean	Std. Deviation
當我演奏樂器時, 我感到十分自信。 Feel confident in my ability to perform in my instrument.	首席 Principal	14	65.14	26.194
	成員 Member	50	65.60	15.562
我能夠達成自己定下的音樂目標。I can achieve musical goals set by myself.	首席 Principal	14	70.29	19.863
	成員 Member	50	68.18	15.142
我能夠解決音樂演奏上的困難。Solve any musical problem I encounter.	首席 Principal	14	64.86	15.216
	成員 Member	50	64.36	19.669
與其他同學相比, 我認為自己是最好的管樂團團員。Compared with other members, I think I am a good player.	首席 Principal	14	54.07	29.627
	成員 Member	50	46.82	24.579

	樂團位置 Position :	N	Mean	Std. Deviation
未來想成為音樂家。Want to be a musician in the future.	首席 Principal	14	54.57	37.574
	成員 Member	50	45.56	32.088
想申請除音樂家、音樂老師以外的音樂相關職位。Want to apply for music-related job positions other than musician, music teacher.	首席 Principal	14	37.14	29.283
	成員 Member	50	41.74	28.822
清晰的目標職業。Feeling clear on the path of career goal.	首席 Principal	14	54.93	27.561
	成員 Member	50	50.06	34.581

The data counted principal: N=14, member: N=50. The mean score is 70.29 for the item of achieving musical goals set by myself for Principals. It implies that principals believe themselves can achieve their musical goals. Both principals and members have a same mean score of solving musical problems. For the career goals of musician, both principals and members have moderate mean scores (37.14% to 54.96%). It reflected that both positions may have not much interest on musical career.

Based on the data, it can be expected that high mean score of items reflect high self-efficacy, which means students have a solid career goal which is related to the participation of symphonic band

Academics & Personal expectations

Table 46&47: Descriptive Statistics of Mean and SD for Academics & Personal expectations - Position of Symphonic Band

	樂團位置 Position :	N	Mean	Std. Deviation
依照期限完成我的功課。Finish my homework assignments by deadlines.	首席 Principal	14	78.64	15.882
	成員 Member	50	81.66	23.646
當有其他認為有趣的事情時，讓自己去學習和嘗試。Get myself to study when there are other interesting things to do.	首席 Principal	14	83.71	14.788
	成員 Member	50	77.10	14.923
在課堂期間做筆記。Take good notes during class instruction.	首席 Principal	14	63.00	24.745
	成員 Member	50	69.14	22.971
安排一個專心的地方進行學習。 Arrange a place to study without distractions.	首席 Principal	14	62.36	26.940
	成員 Member	50	65.82	21.211

	樂團位置 Position :	N	Mean	Std. Deviation
不辜負我父母對我的期望。Live up to what my parents expect of me.	首席 Principal	14	61.29	29.272
	成員 Member	50	68.36	19.302
不辜負老師對我的期望。Live up to what my teachers expect of me.	首席 Principal	14	63.64	27.798
	成員 Member	50	65.66	25.481
不辜負同齡人對我的期望。Live up to what my peers expect of me.	首席 Principal	14	63.00	27.033
	成員 Member	50	67.08	23.398
不辜負我對自己的期望。Live up to what I expect of myself.	首席 Principal	14	71.93	28.250
	成員 Member	50	72.34	20.743

In academic perspective, it scored 77.1 to 83.71 % in completion of homework and learning for both positions. It implies all participants can have a better performance in their academic development. For expectations, members and principals have a similar mean score for all items (61.29% to 72.34%). It may not have a strong effect on expectation aspects from symphonic band participation.

Discussion

The objectives of this study were to develop a better understanding of self-efficacy in symphonic band participation. This helps to make a contribution to the fundamental knowledge of self-efficacy in musical performance. It determined the reliability of

Self-Efficacy Scale in music-related activities. It provided an insight for developing self-efficacy within secondary school symphonic band students.

From the data analysis, there are no big difference between gender and years of symphonic band participation, which has also no significant differences with symphonic band position. No matter it was more than senior year or junior year participation, senior groups' level in some areas were still higher than junior years band participants.

The study aims to show the possible relationship between symphonic band participation and self-efficacy in different aspects. It can help to understand how symphonic band participation affects students' self-efficacy in academic achievement.

As mentioned in the research (McPherson & McCormick, 2006), music learners needed regular practice to improve their musical and instrumental skills. Symphonic band students may have a strong desire to improve themselves and want to be a success person in the examinations or music performances. Based on the research of Becker and Gable (2009), Yusuf (2011) and Khan (2013), self-efficacy was a reliable tool to predict students' academic performance and demonstrated that there was a positive relationship between self-efficacy and academic achievement, with other areas of achievement.

From the result of the questionnaire survey in the study, it also showed that students with high level of self-efficacy are more expected to have a long period of band participation and duties in the symphonic band. Most participants in the research showed high levels of self-efficacy as represented by senior years band members. Mastery experience revealed the greatest effect, proceed by social or verbal persuasion, and finally vicarious experience. Teachers should be aware of the mastery experiences they combine in their instruction as these experiences have a strong degree of influence on students' self-perceptions of musical ability, social ability and problem solving.

Self-efficacy is developed by mastery experiences (Bandura, 1997). Symphonic band students may face failures while practices or rehearsals due to their position or participation years. Yet, diligent symphonic band students would learn and reflect more from their experiences and work harder for an improvement. Senior band students may have a strong motivation to perform excellent n music performances. In the category of music performance, most of senior symphonic band students rate each item moderately higher than junior band students, also with the principals. Thus, senior students are possible to have higher self-efficacy than junior students because they have stronger motivation to have more and more achievement in music. Some senior members may have an intention to pursue music career in the future. Such successful experiences in

symphonic band can help to develop their self-efficacy, especially those who are principals and responsible for solo part.

Results showed that participants gave similar responses to self-efficacy items in terms of school studying, years of participation, or musical performance and social skills. Therefore, most of participants response similar self-perceptions of their music experiences, extra-curricular activities. Such activities may include the attempt of performance to promote positive mastery experiences such as performing for audiences with special pieces that matches students' levels, applying peer models such as outstanding students to foster vicarious experiences, getting more positive feedback from peers and family, and teaching students to manage stress and anxiety during performances.

Moreover, the self-efficacy scale can be applied by teachers to monitor student's rehearsal in symphonic band and able to provide teachers with quantitative feedback regarding the effectiveness of their teaching choices. Also, scores from the scale can be used to identify strengths and weaknesses of the students related to each item of self-efficacy.

Limitation of Study

The data collection procedures had several limitations. The main limitation was the distribution and collection of the survey. It was expected to contribute questionnaire through in-school face-to-face format, however, due to the unforeseen situation of class suspension, the format changed to online mode. Thus, the questionnaire could not be explained in live and monitor the process of students' completion immediately. Students may have doubt when they fill in the questionnaire and some technical problems which cause them incompletely finished. Without teacher guidance, students may complete it randomly and may not be very serious and concerned on the research without researcher and teachers' help. Some students may think this questionnaire is not mandatory, so they may think that they did not have a responsibility in the completion. In these situations, researcher tried to explain more on the first page of questionnaire such as mentioned the target of research, and how to rate each item, and contact more on students and teachers, make sure they have a clear instruction on the study and understand the background of the research. To get a frank result, it is suggested to inform the participants the significances of their contribution to the research. Letting students know the information and evaluation that given will enhance the understanding and guide the development of music subject and other music teams designed to help educators to manage school's development.

There are also some areas that deserve further consideration. First is about the use of qualitative methods for data collection as well as other is the correlation between academic achievement and gender, with the source of self-efficacy. Qualitative method is the way to investigate and compare students' gender and symphonic band participation, it can be an individual interview. Suitable participants may be invited to attend an interview for further research purpose. This can help to know more about the reasons and sources of self-efficacy, to have a deep understanding regarding the relationship between self-efficacy and other possible variables. And know more the reasons of symphonic band students' judgment. For instance, senior year symphonic band students and a few of junior symphonic band students, principals and members are also invited for an interview, this can help to make a comparison on their judgment and why they have such rating on each category.

Also, suggestions for further research contained investigating the development of self-efficacy at different ages, evaluating the relationships between the sources of self-efficacy and other ensembles such as choir, string orchestra, handbell ensembles, recorder team etc as well as using another self-efficacy scale such as "MPSES", "GSES" to develop the investigations of other social and psychological matters e.g. social identity and learning motivation.

Conclusion

In this research, researcher tried to refer self-efficacy scale from previous scholars to create a scale for the evaluation of self-efficacy to let symphonic band students have a self-evaluation in different aspects. Hope can let students think of their ability of social skills, music performances, career aspects based on their experiences on symphonic band participation, to discover whether having relationship between self-efficacy and symphonic band participation. This can help to rethink the function and effects of this music ensemble initially, to consider whether school is suitable for organizing symphonic and make an decision on the arrangement of symphonic band performance or competition, which may help to make a contribution in extra-curricular activities of school development.

From the research, it can be concluded that self-efficacy has no big difference comparing with the item of gender, years of band participation and symphonic band position, which analyzed by the t-test- Cronbach's alphas. It examined the possible relationship (Symphonic band participation, self-efficacy). Self-efficacy is able to increase the confidence of getting better performances in different aspects. In fact, symphonic band is not the only factor which can influence self-efficacy in student's development, which have shown the possible relationship (symphonic band participation, self-efficacy) only.

However, non-symphonic band participants from primary and secondary schools are not selected and compared in this research. Hope can have a further investigation if possible.

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Appendix (Questionnaire)

Self-efficacy for Symphonic Band Participation

Participant Information
*Please circle the appropriate one
Gender: M/ F
School: Primary/ Secondary
Age: _____
Instrument: Flute/Piccolo/Oboe/Clarinet/Bassoon/Saxophone
Trumpet/ Horn/ Trombone/ Euphonium/ Tuba
Percussion/ Double Bass/ Others (Please State): _____
Years of learning instrument: _____
Years of symphonic band participation: _____
Position: Member/ Principal
Parts of mostly playing: Solo/ 1st/ 2nd /3rd/ 4th

The following items are about your opinion of participation in symphonic band.
Please rate how certain you participate symphonic band.
Rate your degree of confidence by recording a number from 0 to 100 using the scale given below:

0=Cannot can do certain do at all, 50=moderately can do, 100= can certainly do or write N/A for some items

1. Feel confident in my ability to perform in my instrument _____
2. I can achieve musical goals set by myself _____
3. Solve any musical problem I encounter _____
4. Compared with other members, I think I am a good player _____
5. Get teachers to help me when I get stuck on schoolwork _____
6. Get classmates to help me when I get stuck on schoolwork _____
7. Get friend to help me when I have social problems _____
8. Learn reading, writing, and language skills _____
10. Learn a foreign language _____
11. Do the things needed to serve in school _____
12. Do the kinds of things needed to take part in school plays _____
13. Do regular physical education activities _____
14. Want to be a musician in the future _____

15. Want to apply for music-related job positions other than musician, music teacher _____

16. Feeling clear on the path of career goal _____

17. Make and keep friends of the opposite gender _____

18. Make and keep friends of the same gender _____

19. Carry on conversations with others _____

20. Work well in a group _____

21. Express my opinions when other classmates disagree with me _____

22. Stand up for myself when I feel I am being treated unfairly _____