

The Relationship between Psychological Capital and Public-mindedness in Secondary School Students

Teeraphan Chalermrunroj MSc¹, Sucheera Phattharayuttawat PhD¹,
Woraphat Ratta-apha MD, PhD¹, Thanayot Sumalrot PhD¹

¹ Department of Psychiatry, Faculty of Medicine Siriraj Hospital University, Bangkok, Thailand

Objective: The present study aimed to investigate the relationship between Psychological Capital and Public-mindedness, and find the components of Psychological Capital that can predict Public-mindedness in the students of one secondary school.

Materials and Methods: The sample group consisted of 420 secondary school students. The data collection instrument was a questionnaire that contained the following three parts: a general Student questionnaire, the Thai Psychological Capital Inventory, and the Public-mindedness questionnaire. The following statistics were used to analyze the data: frequency, percentage, mean, standard deviation [SD], independent samples t-test, one-way analysis of variance [ANOVA], Pearson's product-moment correlation coefficient and Stepwise multiple regression analysis.

Results: The level of Psychological Capital, Psychological Capital components (i.e., hope, self-efficacy, resilience, and optimism), and Public-mindedness in the sample group were moderately high. The comparison of Public-mindedness based on gender found that female students have a higher level of Public-mindedness than male students ($p < 0.01$). The comparison of Public-mindedness based on class level found that students who studied at different class levels have different levels of Public-mindedness ($p < 0.001$). Seventh grade students have a higher level of Public-mindedness than upper class level students ($p < 0.001$). In addition, Psychological Capital and Psychological Capital components were positively correlated to Public-mindedness ($p < 0.001$), and Psychological Capital components, such as self-efficacy, hope, and resilience can predict Public-mindedness in the sample group at 26.1%.

Conclusion: Psychological Capital was positively related to Public-mindedness, self-efficacy, hope and resilience are the components of Psychological Capital that could predict Public-mindedness in the sample group.

Keywords: Psychological Capital, Public-mindedness, Secondary school students

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Modern society is changing rapidly, and this rapid change affected the lifestyle of Thai people in many ways. Overtime, people became less concerned about moral and ethical issue, values, discipline, and indifferent to social problems. This phenomenon effected Public-mindedness. Consequently, many Thai people might express selfishness and a lack of concern for social problems.

Individuals, who expressed desire and behave to help others in society, were called various terminologies such as Public minded, of Public consciousness or Public-spirit. In this study, the author used "Public-mindedness" as according to National Educational Standards⁽¹⁾ and The Basic Education Core Curriculum BE 2551⁽²⁾. Public-mindedness is a characteristic that people expressed by showing concern or thought about social interaction, public properties and possess awareness of various social problems. People with public-mindedness have the motivation to manage, assist, and resolve those problems as though it were their duty, with selflessness, dedication, and responsibility. In addition, they can think, assess, consider, and cooperate with other people

Correspondence to:

Sumalrot T, Department of Psychiatry, Faculty of Medicine Siriraj Hospital, Mahidol University, 2 Wanglang Road, Bangkoknoi, Bangkok 10700, Thailand.
Phone: +66-2-4194260, Fax: +66-2-4194298
E-mail: thanayot.sum@mahidol.ac.th

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as well^(3,4). Therefore, Public-mindedness is a characteristic that should inculcated into young people so that they can prepare themselves effectively for social changes. It is also one of the essential social characteristics that leads to a stable, sustainable, and peaceful society⁽⁵⁾.

Adolescent students are in a period of change and development from childhood to adulthood that occurs rapidly and simultaneously. From “Mental Health Survey of Thai People” in 2009, it was found that teenagers had the highest risk for experiencing mental health problems, because they are at a transitional stage in life an emotionally complicated period in comparison to adults. If they adapted to changes appropriately, as they deal with adversities, they would most likely develop well adjusted psychological well-being as adults. Therefore, the enhancement of mental health resilience could improve the likelihood of well-adjusted well-being and mitigate inappropriate behavior⁽⁶⁾. Positive Psychology is a concept that focused on development of individual mental strength, enhancement of good quality of life, and prevention of possible problems with positive subjective experience using scientific methods. This concept leads to Psychological Capital (PsyCap), which refers to individuals’ positive characteristics or conditions that can be measured and developed. PsyCap consists of the following four positive components: hope, self-efficacy, resilience and optimism^(7,8).

As mentioned previously, the author aimed to investigate relationship between PsyCap and Public-mindedness in secondary school students of Hatyaiwittayalai School. These two variables promoted students’ mental health, and encouraged awareness of social problems that needed to be addressed. In addition, the research coincided with the mission of the school in respect of learning which required students to be ethical and just, have socially desirable values, life skills and public-mindedness⁽⁹⁾.

Objective

The objective of this study is 1) study the relationship between PsyCap and Public-mindedness in secondary school students of Hatyaiwittayalai School and 2) determine whether the components of PsyCap can predict public-mindedness.

Materials and Methods

Participants

The study population consisted of 4,358

students from Hatyaiwittayalai School who were studying in the 2015 academic year⁽¹⁰⁾. The sample size was calculated using the following formula by Phattharayuttawat⁽¹¹⁾;

$$n_{pm} = \frac{NZ^2}{4NE^2 + Z^2}$$

where n_{pm} = number of sample size for approximate p -value in case of the highest deviation ($p = 0.5$, $r = 1 - \alpha$) with error less than E .

N = all the number of member in target population ($N = 4,358$)

Z = value of normal curve at area under the normal distribution ($a/2$); the normal value = $1 - \alpha$

E = error size; the research determined $E = 0.05$ (confidential interval = 95%, $Z = 1.96$)

$$\begin{aligned} \text{so } n_{pm} &= \frac{NZ^2}{4NE^2 + Z^2} \\ &= \frac{(4,358)(1.96)^2}{4(4,358)(0.05)^2 + (1.96)^2} \\ &= 353 \text{ samples} \end{aligned}$$

Therefore, the sample size was 353. Then, the author added approximately 20% of samples in case the students answered the questionnaires incompletely by more than 5% of all the measured items. Therefore, there were 420 students who were in the sample group. Then, the samples were divided into six classes from which the proportions were calculated. There were 60 students in seventh to ninth grade, and there were 80 students in tenth to twelfth grade.

The study was approved by the Siriraj Institutional Review Board [SIRB], Faculty of Medicine, Siriraj Hospital, Mahidol University code No. S433/2015. Participation was voluntary, and all participants signed an informed consent certification. In addition, the data collection process of this study was permitted by the school director.

Procedure and measurement

The data collection instrument was a questionnaire comprised of the following parts:

1) A general student questionnaire, which was a checklist about gender and the class level of the students.

2) The Thai Psychological Capital Inventory [TPCI], which was developed by Tuntatead⁽¹²⁾. It consisted of 4 components of PsyCap (i.e., Hope, Self-

Table 1. The level of psychological capital, psychological capital components and public-mindedness of the sample group

Characteristics	Min-max	Mean	SD	Level
Psychological capital	1.91 to 4.87	3.98	0.40	Moderately high
Hope	2.20 to 5.00	3.85	0.47	Moderately high
Self-efficacy	2.06 to 4.94	3.88	0.45	Moderately high
Resilience	1.58 to 5.00	4.11	0.48	Moderately high
Optimism	1.56 to 5.00	4.18	0.50	Moderately high
Public-mindedness	2.20 to 4.53	3.61	0.41	Moderately high

efficacy, Resilience, and Optimism). There were 53 items with five rating scales from “1” which means “extremely disagree” to “5” which means “extremely agree”. The mean score of this questionnaire can interpret into 5 levels as followed:

- 4.21 to 5.00 classified as very high
- 3.41 to 4.20 classified as moderately high
- 2.61 to 3.40 classified as fair
- 1.81 to 2.60 classified as moderately low
- 1.00 to 1.80 classified as very low

After the data collection, the author examined and analyzed the reliability of the questionnaire using Cronbach’s alpha coefficient reliability of TPCI was 0.937.

1) The Public-mindedness questionnaire was developed by the author consisted of 45 items with five rating scales from “1” which referred to the students who considered that the message was “untrue or rarely practiced” to “5” which referred to the students who considered that the message was “true or usually practiced”. The mean score of this questionnaire can be interpreted at 5 levels as follows:

- 4.50 to 5.00 classified as very high
- 3.50 to 4.49 classified as moderately high
- 2.50 to 3.49 classified as fair
- 1.50 to 2.49 classified as moderately low
- 1.00 to 1.49 classified as very low

After the data collection process, the author examined and analyzed the reliability of the questionnaire using Cronbach’s alpha coefficient (α -coefficient); reliability of the Public-mindedness questionnaire was 0.900.

Analysis

The following statistical methods were used for the analysis of the following data: percentage, mean, standard deviation [SD], independence sample t-test that compared the mean score of Public-mindedness in students based on gender, One-way analysis of variance [ANOVA] that compared the mean score of

Table 2. Comparing mean score of public-mindedness in secondary school students based on gender

Gender	n	Public-mindedness		t-test	p-value
		Mean	SD		
Male	160	3.53	0.42	3.029**	0.0015
Female	252	3.66	0.39		

** p -value <0.01

Public-mindedness in students based on class levels, post hoc testing using Scheffe’s method to examined the pairwise comparison of means, Pearson’s product-moment correlation coefficient to examine the relationship between PsyCap and Public-mindedness, and stepwise multiple regression analysis to determine if the PsyCap components could predict Public-mindedness in secondary school students.

Ethical consideration

The study was approved by the Siriraj Institutional Review Board [SIRB]. Faculty of Medicine, Siriraj Hospital, Mahidol University code No. Si. 433/2015.

Results

There were 412 students (98.10% of 420 samples) who completed the questionnaire, 160 males (38.8%) and 252 females (61.2%). Of these students, there were 60 seventh grade students (14.6%), 60 eighth grade students (14.6%), 59 ninth grade students (14.3%), 79 tenth grade students (19.2%), 74 eleventh grade students (18.0%) and 80 twelfth grade students (19.4%).

The level of PsyCap and Public-mindedness in secondary school students.

As shown in Table 1, the level of PsyCap and all its components and Public-mindedness are moderately high ($\text{PsyCap} = 3.98$; $\text{Public-mindedness} = 3.61$).

Table 3. Comparing mean score of Public-mindedness of class levels, and the pairwise comparison of means of Public-mindedness of the sample group who study different class level using Scheffé's method

Class Level	n	Public-mindedness		F-test	Class level						
		Mean	SD		7th grade	8th grade	9th grade	10th grade	11th grade	12th grade	
7th grade	60	3.87	0.41	7.184***	-	0.25*	0.33***	0.26*	0.39***	0.28**	
8th grade	60	3.62	0.38			-	0.08	0.01	0.14	0.03	
9th grade	59	3.54	0.39				-	-0.07	0.06	-0.05	
10th grade	79	3.61	0.36					-	0.13	0.02	
11th grade	74	3.48	0.44						-	-0.11	
12th grade	80	3.59	0.39							-	

* p -value < 0.05 , ** p -value < 0.01 , *** p -value < 0.001

The comparison of the mean score of Public-mindedness in secondary school students based on personal factors, gender and class levels.

Gender

As presented in Table 2, female students have a higher level of Public-mindedness than male students ($_{female} = 3.64$, $_{male} = 3.53$) with a statistical significance ($p < 0.0015$).

Class levels

As shown in Table 3, students who study in different class levels have different levels of Public-mindedness with a statistical significance ($p < 0.001$). In addition, Scheffé's method was examined by pairwise comparison of means as shown.

Most of the Public-mindedness levels of Hatyaiwittayalai School students are moderately high, except eleventh grade students are fair. Seventh grade students have different Public-mindedness from upper class level students ($_{7th\ grade} = 3.87$; $_{8th\ grade} = 3.62$, $_{9th\ grade} = 3.54$, $_{10th\ grade} = 3.61$, $_{11th\ grade} = 3.48$, $_{12th\ grade} = 3.59$) with a statistical significance ($p < 0.05$).

There is no statistical difference in Public-mindedness in eighth, ninth, tenth, eleventh and twelfth grade students.

The relationship between PsyCap and Public-mindedness in secondary school students

As illustrated in Table 4, PsyCap is positively related to Public-mindedness ($p < 0.001$). In addition, most components of PsyCap (i.e., hope, self-efficacy, and resilience) are positively related to Public-mindedness at a moderate level ($0.40 \leq r < 0.59$)⁽¹³⁾, except optimism, which was positively related to Public-mindedness at a weak level ($r = 0.339$) ($0.20 \leq r < 0.39$)⁽¹³⁾.

Table 4. The result of correlation coefficient analysis to measure the correlation between Psychological Capital and Public-mindedness of the sample group

	Public-mindedness
Psychological Capital	0.503***
Hope	0.452***
Self-efficacy	0.455***
Resilience	0.429***
Optimism	0.339***

*** p -value < 0.001

Table 5. The multiple regression analysis to find Psychological Capital components that can predict Public-mindedness of the sample group

Factors	b	SE(b)	Beta	t	p-value
Self-efficacy	0.501	0.148	0.209	3.381***	0.001
Hope	0.539	0.159	0.207	3.385***	0.001
Resilience	0.546	0.187	0.170	2.913**	0.004
	a = 71.387	SEE = ±15.8			
	r = 0.511	R ² = 0.261			

** p-value <0.01, *** p-value <0.001

Psychological components that can predict Public-mindedness in secondary school students

As shown in Table 5, there are three PsyCap components: self-efficacy, hope, and resilience. They are the best predictors to predict Public-mindedness in students jointly at 26.1%, while optimism cannot predict Public-mindedness in students.

Discussion

The level of Psychological Capital and Public-mindedness in secondary school students

The result of the present study found that the level of PsyCap in secondary school students was moderately high, and the levels of the four components of PsyCap (i.e., hope, self-efficacy, resilience and optimism) were moderately high as well. These findings agreed with Chalermrungrroj⁽¹⁴⁾ who found that the level of PsyCap in secondary school students were moderately high. These results are probably due to the fact that Hatyaiwittayalai School has relevant curricula and an environment that encourages and promotes PsyCap in students (e.g., academic skill competitions, student council, sport days, social activities, and volunteer opportunities). The students would have the opportunity to think, analyze, determine and express themselves through the activities both inside and outside the school⁽¹⁵⁾. Moreover, positive reinforcement, feedback, and guidance from teachers encourage the students to participate in these activities. According to Kantasorn⁽¹⁶⁾, the school atmosphere, caring teachers, and lesson plans can support the students' desirable attitudes and characteristics. Likewise, Luthans et al⁽¹⁷⁾ stated that the organization atmosphere will affect the level of PsyCap.

According to Basic Education Core Curriculum BE 2551, every school's curriculum has to provide activities that develop students to their highest potential in all aspects (i.e., physical, intellectual, emotional and social). In addition, it

must also strengthen and inculcate moral and ethical values, self-discipline, philanthropic spirit for social benefits by participating in activities for society and public interests such as volunteering in their communities, which manifests responsibility, virtue, selflessness and public-mindedness⁽²⁾. This may explain the level of public-mindedness in students, which was moderately high. This school also complied with the Creativity, Action, Service [CAS] organization regarding service. This organization encouraged the students to have awareness, responsibility, and collaborative and reciprocal engagements within their community, according to World-Class Standard School instruction guidelines⁽¹⁸⁾.

Comparing the mean score of Public-mindedness in secondary school students based on personal factors: gender and class levels.

Gender

The results found that female students had a higher level of Public-mindedness than male students ($p < 0.01$). The findings resembled that of Chancharoen⁽¹⁹⁾ and Saengsook⁽²⁰⁾ who found that female students have a higher level of public-mindedness than male students ($p < 0.05$ and 0.01 , respectively). Feminine characteristics such as politeness, gentle, delicacy, tidiness, responsiveness and attentiveness to others' feeling were predominant compared to males⁽⁴⁾. Although the mean score of Public-mindedness of females is 3.66 which is more than the mean score of male students ($\bar{x}_{\text{male}} = 3.53$), both of them were considered moderately high.

Class levels

The results found that students who studied at different class levels had different levels of Public-mindedness, ($p < 0.01$). Seventh grade students had a higher level of Public-mindedness than upper class students with statistical significance. This finding

complied with Kota⁽²¹⁾ who found that first-year undergraduate students had a higher level of public-mindedness in responsibility than fourth-year undergraduate students ($p<0.05$). It is likely because seventh grade students have just entered the secondary education level as first year, which resembled the environment of first-year undergraduate students who have just entered the higher education and went through an adjustment period. Therefore, they learned to adapt to the university's culture by following the rules and be respectful of professors, senior students, and officers. Moreover, the culture included new social groups with new friends and peer groups. Similarly, Jaitrong⁽²²⁾ stated that social adaptation is an individual effort in appropriately adjusted oneself to problems and preserving good relationships with other people. However, when adapting to a new situation, their expressed behavior might be for the purpose of conformity to the institute's rule and social values rather than be themselves. The human desire for social acceptance and maintenance of interpersonal relationships played a large role. Therefore, they adjusted their behavior to conform to social standards and rules.

Eighth to twelfth grade students demonstrated no statistical difference in Public-mindedness. As they became more adjusted and accustomed to the environment, education programs, activities, and nurturing of moral and ethical values, they learned appropriate adjusted responses when they received new knowledge or encountered new experiences⁽⁴⁾. It is the result of government policies and education standards that constituted the framework and guidelines to teach students the skills of public-mindedness and other desirable characteristics⁽²³⁾.

The relationship between PsyCap and Public-mindedness in secondary school students

The result showed that PsyCap was positively related to Public-mindedness at a moderate level ($p<0.01$). Although, there was no previous study directly associated with PsyCap and Public-mindedness, there were some findings regarding PsyCap components, Public-mindedness, and similar behavior in students. For example, self-efficacy was positively related to public-mindedness in students, with a statistical significance at the 0.01 level^(24,25). Optimism was also positively related to public-mindedness in students, with a statistical significance at the 0.01 level⁽²⁶⁾. These findings revealed that positive

characteristics can be enhanced and contributed to resilience mental strengths, and appropriate behaviors. According to the previous researches, the study of PsyCap in Thailand found that it was positively related to leadership⁽¹⁶⁾, study strategies⁽¹⁵⁾ and ethical behavior⁽¹⁴⁾. Moreover, this finding supported the goal of education in National Education Standards that required Thai people to have the "competent, virtuous and happy life". The indicators of this goal were the people should have good physical and mental health, knowledge and skills that are sufficient for leading meaningful and social development, learning skills and self-adjustment, social skills, righteousness, public-mindedness, and consciousness of citizenship⁽¹⁾.

Psychological capital components could predict Public-mindedness in secondary school students

The result showed that self-efficacy, hope and resilience, are the best predictors to predict Public-mindedness jointly in the sample group. Each of components is explained below:

Self-efficacy is the first component that could predict Public-mindedness in secondary school students. People with self-efficacy have the confidence to believe in themselves and their ability to do something. They can deal with a situation and change it⁽⁸⁾. Therefore, self-efficacy contributed to public-mindedness in people. When they perceived the problems in their communities or society, they feel that it is their duty to help, and they have the capability to manage, assist and solve those problems. Self-efficacy contributed to motivation and action that expressed public-mindedness. People with self-efficacy also participated in activities with other people without feeling discouraged if they do not succeed. In addition, teachers influenced public-mindedness in their students because students spend a significant amount of time in school, and interacted with their teachers. Therefore, teachers have the opportunities to be good role models for students by being an example of an individual with public-mindedness⁽²⁵⁾. For example, teachers could explain and teach the students how to behave in public-minded like behavior in the public place within the classroom setting. It encouraged the students to have empathy for other people and tend to modify their behavior, accordingly. Moreover, teaching through the role models, positive reinforcement and environmental management in the institute will support and contribute to public-mindedness in students⁽²⁷⁾. According to Bandura⁽²⁸⁾, performance attainment, vicarious experience, and verbal persuasion by reliable people

will increased self-efficacy in others.

Hope is the second component that could predict Public-mindedness in secondary school students. People with hope set goals and have confidence that they can succeed; therefore, they have the motivation and intention to achieve the goal. When they encounter the difficulties, they will attempt to find solutions to solve problems without feeling discouraged^(29,30). Therefore, hope contributed to public-mindedness in people, which can decrease social problems. These people will be more aware and recognize the social issues that happen in their communities. They analyzed and criticized those issues, then set goals, to find ways to solve problems by themselves, or collaborate with others to exchange and share their comments, and engage in social activities. Moreover, they also have self-confidence that they can help to solve those issues⁽³¹⁾.

Resilience is the third component that could predict Public-mindedness in secondary school students. People with resilience understand themselves and others by expressing their love, empathy, and altruism. They have faith and believe in morality and goodness, and they also have a sense of responsibility. These characteristics led people to have social skills and suitable behaviors. They are good communicators, good at regulating their feelings and impulses, and perceive another's temperament before expressing themselves appropriately. When they face obstacles, they can think, analyze and manage the problems creatively⁽³²⁾. According to Chareonwongsak⁽³³⁾ and Varoonpitigul⁽³⁴⁾, people with public-mindedness would have both desirable psychological and behavioral characteristics that are expressed by having good interpersonal relationships. They have the ability to deal with problems while effectively adapting and responding to the changing environment. These are the results of nurturing parents who support their children to be autonomous individuals and of social support from teachers and friends who provide appropriate role modeling. These factors will encourage and develop stable and secure feelings, positive attitudes, the recognition of value in actions, the motivation to overcome obstacles and difficulties, the adaptation to encounter unexpected problems, and readiness to learn and develop themselves^(17,32,35).

Conclusion

The level of PsyCap and Public-mindedness in secondary school students of Hatyaiwittayalai

School was moderately high. In addition, PsyCap was positively related to Public-mindedness. Self-efficacy, hope and resilience are the components of PsyCap that could predict Public-mindedness in the sample group at 26.10%. Therefore, the promotion and support of PsyCap components could assist in the development and increase in public-mindedness in secondary school students.

What is already known on this topic?

PsyCap was positively related to Public-mindedness in secondary school students. In addition, PsyCap is a psychological component that people can develop and expand.

What this study adds?

Further research should expand the sample groups, other schools, and education levels, and it should study other psychosocial factors that may help explain public-mindedness in students (i.e. studying programs, grade point average [GPA], leadership, or social networking in daily life). In addition, the research should develop a program to study the result of PsyCap that affect to Public-mindedness in students.

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Potential conflicts of interest

None.

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