

คณะจิตวิทยา

**THE INFLUENCES OF EMPATHY AND PROBLEM CHARACTERISTICS
OF THE PERSON IN NEED ON PROSOCIAL BEHAVIOR OF
UNDERGRADUATE STUDENTS**

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The purpose of the study was to preliminary investigate the influence of empathy and problem characteristics of a person in need on prosocial behavior. The research questions were (1) Do participants with high empathy decide to help the character of the mental problem vignette more than participants with low empathy? (2) Is there any difference in the tendency to help the character of the physical vignette between participants with high empathy and participants with low empathy? To answer these two questions, a priori comparison was conducted. Participants of the study were 201 (152 women and 49 men) freshmen and sophomores of the Psychology Faculty at Chulalongkorn University. After allocated to high and low empathy groups by responding the Basic Empathy Scale, the mental and physical vignettes were alternated and systematically randomized and assigned to each participant. Then, participants rated the percentage chance they would decide to help the character of the vignette and rated their empathic concern toward the character.

The obtained results are that

1. Participants with high levels of empathy decided to help the character of the mental problem vignette more than participants with low levels of empathy significantly at the alpha level of .01.
2. The difference of the decision to help in physical problem between high empathic participants and low empathic participants was not significant at the alpha level of .05.

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พินิตา เสือวรรณศรี: อิทธิพลของความสามารถในการเข้าใจความรู้สึกของผู้อื่นและลักษณะปัญหาของผู้ที่ต้องการความช่วยเหลือที่มีผลต่อพฤติกรรมการให้ความช่วยเหลือของนิสิตปริญญาตรีจุฬาลงกรณ์มหาวิทยาลัย. (The influences of empathy and problem characteristics of the person in need on prosocial behavior of undergraduate students) อ.ที่ปรึกษา: ผู้ช่วยศาสตราจารย์ ดร. อรัญญา ตัญคำภีร์, จำนวนหน้า 32 หน้า.

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาอิทธิพลของความสามารถในการเข้าใจความรู้สึกของผู้อื่นและลักษณะปัญหาของผู้ที่ต้องการความช่วยเหลือที่มีผลต่อพฤติกรรมการให้ความช่วยเหลือของนิสิตปริญญาตรีจุฬาลงกรณ์มหาวิทยาลัย โดยมีคำถามการวิจัยดังนี้ (1) กลุ่มตัวอย่างที่มีความสามารถในการเข้าใจความรู้สึกของผู้อื่นอยู่ในระดับสูงจะตัดสินใจช่วยเหลือบุคคลที่มีปัญหาทางจิตใจมากกว่ากลุ่มตัวอย่างที่มีความสามารถในการเข้าใจความรู้สึกของผู้อื่นอยู่ในระดับต่ำหรือไม่? (2) ระหว่างกลุ่มตัวอย่างที่มีความสามารถในการเข้าใจความรู้สึกของผู้อื่นอยู่ในระดับสูงและกลุ่มตัวอย่างที่มีความสามารถในการเข้าใจความรู้สึกของผู้อื่นอยู่ในระดับต่ำมีความแตกต่างกันของแนวโน้มการตัดสินใจช่วยเหลือบุคคลที่มีปัญหาทางร่างกายหรือไม่? การวิจัยครั้งนี้เป็นการวิจัยกึ่งการทดลอง โดยมีกลุ่มตัวอย่างเป็นนิสิตระดับปริญญาตรีชั้นปีที่ 1 และ 2 คณะจิตวิทยา จุฬาลงกรณ์มหาวิทยาลัย จำนวน 201 คน ประกอบด้วยเพศชาย 49 คน เพศหญิง 152 คน กลุ่มตัวอย่างจะถูกแบ่งออกเป็นกลุ่มที่มีความสามารถในการเข้าใจความรู้สึกของผู้อื่นสูงและกลุ่มที่มีความสามารถในการเข้าใจความรู้สึกของผู้อื่นต่ำด้วยแบบวัด Basic Empathy Scale จากนั้นแต่ละคนจะถูกสุ่มให้อ่านสถานการณ์ที่บุคคลมีปัญหาทางจิตใจหรือทางร่างกายอย่างใดอย่างหนึ่ง และระบุแนวโน้มที่จะตัดสินใจเข้าไปช่วยเหลือบุคคลดังกล่าว รวมทั้งระบุระดับความรู้สึกของตนเองที่มีต่อบุคคลในสถานการณ์ที่ได้รับ สถิติที่ใช้วิเคราะห์ข้อมูลใช้การวิเคราะห์เปรียบเทียบรายคู่ (priori comparison)

ผลการวิจัยพบว่า

1. กลุ่มตัวอย่างที่มีความสามารถในการเข้าใจความรู้สึกของผู้อื่นอยู่ในระดับสูงตัดสินใจช่วยเหลือบุคคลที่มีปัญหาทางจิตใจมากกว่ากลุ่มตัวอย่างที่มีความสามารถในการเข้าใจความรู้สึกของผู้อื่นอยู่ในระดับต่ำอย่างมีนัยสำคัญทางสถิติที่ระดับ .01
2. ระหว่างกลุ่มตัวอย่างที่มีความสามารถในการเข้าใจความรู้สึกของผู้อื่นอยู่ในระดับสูงและกลุ่มตัวอย่างที่มีความสามารถในการเข้าใจความรู้สึกของผู้อื่นอยู่ในระดับต่ำไม่มีความแตกต่างกันของแนวโน้มการตัดสินใจช่วยเหลือบุคคลที่มีปัญหาทางร่างกาย

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Chapter 1

Introduction

Background and Significance of the Study

Every day, it can be seen that people help the other who is being in need. A gentleman gives a lady a seat or a young person takes an old one across the street. This kind of help is easy to do and regularly happens because the person's need is noticeable and understandable. The helper can easily perceive and interpret a physical problem or a situation of the recipient so it does not take any effort to decide whether to help. On the other hand, if people see a man sitting desperately and nervously, the question of whether they suddenly decide to help is asked. Noticeably, people tend to give money to a poor person with handicap but refuse to help someone who is crying or being anxious. This difference leads to the questions "When will people decide to help a person who is being in need?" and "What a salient factor does involve in helping behaviors of people?"

According to the Latane and Darley decision model of bystander intervention (Dovidio, Piliavin, Schroeder, & Penner, 2006), a person will go through five decision-making steps before taking a helping action. First, the bystander must notice that something is wrong in the situation. Certainly, if the person does not know that there is another one who is in pain and needs help, the helping behavior never occurs. This step requires the awareness of the helper and the clarity of the situation. If the helper does not perceive the necessary to help whether because the helper does not aware of it or because the situation is too ambiguous to perceive, the helper can not know what to do. The next step is interpreting a need of help. This step is quite similar to the previous one that the situation must be interpreted as an emergency. There probably are screams or any other

distress cue that convince the helper of the need of help. The distress cue can make the situation more clear and unambiguous. The third step is to take personal responsibility. When a person believes that the situation is his or her responsibility probably because he or she is the only witness to the situation, the possibility to help will increase. Therefore, the presence of others is another variable that affects helping. The fourth and the last step are deciding what kind of help to give and doing it. As it can be seen in the Latane and Darley decision model of bystander intervention, one important factor that affects the decision to help is the clarity of the situation. If the situation is ambiguous, it would disturb the emergency of the situation and the interpretation of the helper. Accordingly, it is in doubt that if the problem of a person in need is ambiguous and difficult to understand, will the person still be helped?

Batson and Powell (2003) mentioned that helping behavior or prosocial behavior can be predicted by two factors, dispositional and situational factors. Then, in spite of the situational factors, there is another factor that affects the decision to help. The dispositional factor or the trait of a person can influence prosocial behavior. The most interesting dispositional factor is empathy because it can increase helping action (Dovidio et al., 2006). Even though the person in need is stigmatized and labeled as unpredictable and dangerous which make other people create the social distance between them, the high empathic person, on the other hand, has less social distance (Phelan & Basow, 2007). Therefore, it is interesting to study whether these two variables, the clarity of the problem and the empathy, will affect prosocial behavior.

Literature Review

The following is a review of literature, including empirical studies relating to the main variables of the current study. First, prosocial behavior will be reviewed. Then, the concept of empathy and the characteristics of problem are described in order.

1. Prosocial behavior

With many people's common sense, the terms of helping behavior and prosocial behavior are similar to each other and can be used interchangeably. However, helping behavior is broader than prosocial behavior because helping behavior covers every kind of help, including the obligation of helpers. Meanwhile, prosocial behavior does not count the behavior which is paid for or the obligatory help (Bierhoff, 2002). For example, serving a customer a dinner is called helping behavior but not prosocial behavior because the waiter was paid to do it. This research focuses on prosocial behavior instead of altruistic behavior or egoistic behavior to avoid the controversy whether the action of help is altruistic or egoistic behavior. The altruistic behavior is the behavior that is driven from the motivation for benefiting and increasing another person's welfare without any reward in return, while the egoistic behavior is driven by the motivation for benefiting the helper with or without intention (Snyder & Lopez, 2002). Because this paper does not aim to test the motivation behind helping, prosocial behavior is the appropriate purpose of the research.

The word "prosocial" was created by social scientists as an opposite word of "antisocial" (Batson & Powell, 2003). According to Bierhoff, prosocial behavior means "the action is intended to improve the situation of the help-recipient, the actor is not motivated by the fulfillment of professional obligations, and the recipient is a person and not an organization" (Bierhoff, 2002, p. 9). Piliavin, Dovidio, Gaertner, and Clark (1981) also defined that prosocial behavior is "defined by society as generally beneficial to other people

and to the ongoing political system” (as cited in Dovidio, Piliavin, Schroeder, & Penner, 2006, p. 21). Determined by these two definitions, prosocial behavior is the action that benefits others in the appropriate context and it is not obliged to take.

Smithson, Amato and Pearce (1983, as cited in Bierhoff, 2002) arranged prosocial behaviors into several dimensions. The first step used the degree of perceived similarity between different kinds of 62 helping episodes such as “Stopping to pick up a hitch-hiker standing along the roadside.” and “Donating money to a charity box.” Each pair of helping episodes was assessed by students at the University of North Queensland in Australia on a 5-point scale of how similar this pair was. The results were four clusters; emergency intervention; formal organizational helping; informal, casual, everyday help to strangers; and donating and sharing. In the next step, multidimensional scaling was used to identify the clusters into three dimensions; planned, formal help vs. spontaneous, informal help; serious situations vs. not serious situations; and doing, direct help vs. giving, indirect help. Later, to complete the whole form of prosocial behavior, personal vs. anonymous dimension was added to the prior.

Prosocial behavior can be predicted by two factors, dispositional and situational factors. The dispositional factors include authoritarianism, autonomy, intelligence, nurturance, religiosity, self-esteem, social desirability, social responsibility, etc. However, each dispositional factor can not predict prosocial behavior by itself. Batson and Powell (2003) and other researchers also mentioned that the situational factors, on the other hand, are better predictors of prosocial behavior than the dispositional ones. The situational factors include ambiguity of need, severity of need, physical appearance of victim, similarity to victim, friendship, number of bystanders, location, cost of help and not help, etc. Nevertheless, a lot of researches focused on both of predictors. For example, Graziano, Habashi, Sheese and Tobin (2007) studied the interaction between agreeableness and

situations on helping. They found that people high in Agreeableness were more willing to risk negative consequences to help others in both ordinary (stopped the car to help another whose car was broken down) and extraordinary (risked the life to save others in a burning house) situations than were the participants low in Agreeableness.

2. Empathy

Empathy is a complex and multifaceted construct which has long been investigated in many studies. It has been considered in two approaches, affective and cognitive ones (Jolliffe & Farrington, 2006). Affective empathy refers to the feeling of a person affected by the other's emotional state, which may or may not match to each other's, but it should be appropriate for the other's emotional state (Baron-Cohen & Wheelwright, 2004). It is a construct of low-level processes like emotional contagion (Leiberg & Anders, 2006). Whereas cognitive empathy refers to a construct of high-level processes such as perspective-taking (Leiberg & Anders, 2006), so it is the ability to understand the other's feelings, thoughts, or mental state (Baron-Cohen & Wheelwright, 2004). In combination, empathy is the ability to share (affective component) and understand (cognitive component) the feelings and thoughts of others (Jolliffe & Farrington, 2006; Moriguchi et al., 2007).

In order to measure empathy, it is important to know the characteristics of empathy. Empathy can be viewed as a state, the predispositional empathy or situation-specific empathy (Bierhoff, 2002), which is an induced empathy occurring when a person is aroused by another person's distress. Leiberg and Anders (2006) stated that empathy can be induced by emotional verbal and written descriptions, or internally by thoughts or imagination. Therefore, a person can empathize with others even though that person is not actually being in their situations, but using the imagination and the perspective-taking instead. Some studies (Batson et al., 1997; Graziano, Habashi, Sheese, & Tobin, 2007) induced empathic concern

of participants by instructing them to imagine how the character in a vignette or in a recorded tape felt and thought about the situation. On the other hand, in a low empathic concern group, participants were told to focus on the others such as the objective perspective of the description or the technical system, not the feeling. To measure empathic concern, six empathy adjectives - sympathetic, compassionate, softhearted, warm, tender, and moved - were responded by participants and averaged to find the empathy index score (Dovidio, Schroeder, & Allen, 1990; Batson, Chermok, Hoyt, Ortiz, & Eklund, 2007).

Another viewpoint on empathy is that it is a personality trait or a dispositional empathy which varies between individuals (Leiberg & Anders, 2006). Dovidio, Piliavin, Schroeder and Penner (2006) defined dispositional empathy as “a consistent tendency to respond emotionally to other people’s emotional experiences and to understand their point of view” (p. 232). This perspective explains why some people always care about others and understand the other’s feelings and thoughts well. While some people may not be interested in the other’s problems and lack sharing the other’s feelings (Bierhoff, 2002). As a result, several self-reported questionnaires have been developed to measure the level of empathy (Davis, 1980; Jolliffe & Farrington, 2006). The current study uses the Basic Empathy Scale (BES), 20 items (Jolliffe & Farrington, 2006 as cited in Albiero, Matricardi, Speltri, & Toso, in press) to measure empathy.

Prior empirical studies have documented that empathy affects prosocial behavior. Dovidio et al. (2006) concluded that people with high dispositional empathy would help more than the low ones. Davis (1980) found a significant correlation between students’ empathy rated by *Interpersonal Reactivity Index* (IRI) and an amount of money the student donated to a telethon. In Otten, Penner and Altabe’s work (1991, as cited in Dovidio et al., 2006) found that psychotherapists with high dispositional empathy helped a person with a work assignment more than the low ones. Einolf (2008) also found the associations between

empathic concern and spontaneous helping such as allowing a stranger to cut ahead in line, consoling a depressed person, and giving money to a homeless person.

3. Characteristics of problem

The ability to empathize per se is not sufficient to affect a helping decision (Leiberg & Anders, 2006). Further studies have searched for situations that may interact with empathy and influence helping. Dovidio et al. (2006) pointed out that personality interacting with a situational factor has an impact on people's thoughts, feelings, and decisions to help. They also suggested that a situation with greater clarity, need, and severity will arouse higher empathy than an ambiguous situation. To support this idea, Clark and Word (1972, as cited in Dovidio et al., 2006) found that students helped more when the situation was unambiguous because in an ambiguous situation, it is difficult to interpret whether this situation is necessary to help. Thus, people will not decide to help immediately. In addition, Staub (2003) pointed out that if the nature of stimulus for help such as someone's physical or psychological need, its degree, nature, and manner of presentation is ambiguous, it will interfere with the interpretation of a person's need. The ambiguity may worry the helper whether the help will be inappropriate or silly. Apparently, despite the level of empathy, the clarity of a situation could influence prosocial behavior. This brings an interest to study the clarity in term of two different problems of a person in need: a physical problem and a mental problem.

A mental problem or psychological pain is "a diffuse subjective experience and is differentiated from physical pain which is often localized and associated with noxious physical stimuli" (Mee, Bunney, Reist, Potkin & Bunney, 2006, p. 681). Because psychological pain is diffuse and subjective, it cannot be adequately and precisely defined. American Psychiatric Association (2000) stated that each concept of mental disorders -

distress, dysfunction, dyscontrol, disadvantage, disability, inflexibility, irrationality, syndromal pattern, etiology, and statistical deviation- is useful indicator but cannot represent the whole mental disorders in different situations. Thus, the mental illness or mental problem is ambiguous and difficult to understand. In this study, the mental illness situation is created according to the major depression symptom in Diagnostic and Statistical Manual of Mental Disorders (DSM IV) (Phelan & Basow, 2007) and any other symptoms that are not found in DSM IV will be a physical problem.

To study the interaction between the level of empathy and the types of problem, several researches have shown the possibility that these two variables may have some connections. First, the ambiguity of the situation can interfere with the perceptual tendency. Specifically, if another person's need is easily noticeable, the ability to perceive it does not require any special skill or sensitivity. In this case, the need is usually in emergency and responds to the other's physical distress or to a person's life in danger. However, if the need is not obvious, the role-taking skill is necessary for the perception (Stuab, 2003). As a result of the subjective mental problem, individuals who can perceive this need should have the role-taking skill, which is found in those who have high empathy. Loggia, Mogil and Bushnell (2008) found that participants who were induced to have high empathy (state empathy) perceived painful stimuli more intense and unpleasant than low-empathy group did. But in this study, there was no difference in terms of dispositional empathy.

Another relation between the empathy and the characteristics of problem is that the high empathic person tends to have more positive attitude toward a person with psychological need. Generally, people who have mental illness will be stigmatized by the society. This stigmatized group will be negatively labeled and perceived to be dangerous and unpredictable. This can increase a desire for social distance. However, Phelan and Basow (2007) found that people who indicated to have more empathy were less likely to desire for a

social distance from the person with major depression. Moreover, in the study of Batson and his colleagues (1997) showed that participants who were induced to have high empathic feeling reported more positive attitudes toward people with AIDS than participants in low empathic condition. The result was also the same when the target stigmatized group was changed into a homeless person.

In conclusion, studies reveal that empathy and clarity of situation can affect prosocial behavior. People who have high empathy or have been induced to have it are more likely to help than those who have the low one. Moreover, if the situation is ambiguous, people will be reluctant to help. Although there are a lot of studies investigated the impact of empathy and situation on prosocial behavior, they had been studied separately. A few researches focused on the relationship between empathy and situation. For example, the study of Phelan and Basow (2007) found that empathy can reduce the social distance from the stigmatized person like the major depressive one. However, the study did not investigate the effect of empathy and the clarity of the situation on helping. Therefore, this present study aims to examine influence of empathy and problem characteristics on the prosocial behavior.

Research Questions and Hypotheses

This study aims to answer two main questions with the hypotheses as following.

Question 1: Do participants with high levels of empathy decide to help the character of the mental problem vignette more than participants with low levels of empathy? A null hypothesis (Ho1) will be tested for this question.

Ho1: Participants with high levels of empathy decide to help equally or less than participants with low levels of empathy in the mental problem vignette.

Question 2: Is there difference in the tendency to help the character of the physical vignette between participants with high empathy and participants with low empathy? A null hypothesis (Ho2) will be tested for this question.

Ho2: There is a difference between participants with high empathy and participants with low empathy in the tendency to help the character of the physical vignette.

Definition of Key Terms

Prosocial behavior is narrower than helping behavior but in the meantime it is broader than either egoistic or altruistic behavior. Prosocial behavior is the action to improve other's situation; the actor is not motivated by the duty or the obligation and the recipient is a person not an organization (Bierhoff, 2002).

Empathy is defined as an affective and a cognitive empathy (Jolliffe & Farrington, 2006). Affective empathy is the feeling of a person which is affected by the other's emotion while cognitive empathy is to understand the other's feeling, thought, or mental state (Baron-Cohen & Wheelwright, 2004). Therefore, empathy is the ability to share and understand the other's feeling and thought (Jolliffe & Farrington, 2006; Moriguchi et al., 2007).

Mental problem or psychological pain is difficult to define, as Mee, Bunney, Reist, Potkin and Bunney (2006) said that psychological pain is a diffused subjective experience and is different from physical pain which can be localized and have painfully physical stimuli. To clearly distinguish the difference between mental and physical problem, the researcher defined mental problem as a disorder that can be found in Diagnostic and Statistical Manual of Mental Disorders (DSM IV).

Physical problem refers to the any other problem which is not the mental problem or can not be found in DSM IV, supported by Longman Dictionary of Contemporary

English (2005) which defined “physical” related to someone’s body rather than their mind or emotion.

Chapter 2

Methodology

Research Design

The purpose of this research is to preliminary investigate the influence of empathy and problem characteristics of a person in need on prosocial behavior. Empathy and characteristics of the problem were the independent variables and prosocial behavior was the dependent variable. Due to the fact that the variables studied were manipulated without randomization, this study has a quasi-experimental research design. One major advantage of using a quasi-experimental research design is that it provides preliminary evidence for verifying potentially effective treatments or for explaining a causational phenomena.

Participants

Participants were 201 (152 women and 49 men; aged between 18-21) freshmen and sophomores of the Psychology Faculty at Chulalongkorn University. The reason for using freshmen and sophomores was that they have never studied abnormal psychology before so they did not have the knowledge about major depressive symptom.

Instruments

The Basic Empathy Scale. To distinguish participants between high and low empathy, a Thai version of the Basic Empathy Scale (Jolliffe & Farrington, 2006) was used. After translated into Thai language, each item was reviewed by the project advisor (Assistant Professor Dr. Arunya Tuicomepee), and the experts (Dr. Kullaya Pisitsungkagarn, Assistant Professor Chutima Phongvarin, and Tanyuda Booranawut). To assess the reliability and the

validity, the questionnaire was tested in 100 junior students of the Psychology Faculty at Chulalongkorn University. The reliability of the Thai version of the questionnaire was tested by Cronbach's Alpha which valued .75.

To test the construct validity of the Thai version of the Basic Empathy Scale (BES), the BES was correlated with Agreeableness in the Big Five. Because Agreeableness refers to altruism and sympathy, the Basic Empathy Scale was expected to correlate with the Agreeableness Scale (Jolliffe & Farrington, 2006). In the present trial, the Basic Empathy Scale ($M = 75.08$, $SD = 6.57$) were significantly correlated with the Agreeableness Scale ($M = 32.38$, $SD = 4.35$), $r = .39$, $p < .01$.

The mental and physical vignettes. In the present study, the mental vignette was taken from the major depression vignette of the College Students' Attitudes Toward Mental Illness: An Examination of the Stigma Process (Phelan & Basow, 2007; details see Appendix). The vignette was translated into Thai language before assigning to the participants. Another vignette which was a physical one was developed by the researcher (details see Appendix). Both vignettes were revised in minor ways by the project advisor (Assistant Professor Dr. Arunya Tuicomepee) and the experts (Ajarn Chawallanat Lawpoonpat and Dr. Apitchaya Chaiwitikornwanich)-to ensure that there was no sign of mental illness in the physical vignette.

The Empathic Concern Scale. To measure the feeling of empathic concern, six empathy adjectives - sympathetic, compassionate, softhearted, warm, tender, and moved - were used as a Likert-type scale (1 = not at all, 7 = extremely). These adjectives were translated into Thai language by the researcher and were revised in minor ways by the project advisor (Assistant Professor Dr. Arunya Tuicomepee), and the expert (Dr. Kullaya Pisitsungkagarn)

Procedure

First, participants were allocated to high and low empathy groups based on their scores of the Thai version of the BES. Participants who scored equally or higher than the 73th percentile of the 201 participants were allocated to the high empathy group. The others who scored equally or lower than 23rd percentile rank were allocated to the low empathy group. After the allocation, there were 54 participants in each group

Then, the mental and physical vignettes were alternated and systematically randomized and assigned to each participant. One participant would respond to one situation. Thus, there were 27 participants who responded to the mental vignette and 27 participants who responded to the physical vignette in both high and low empathy groups.

After reading the vignette, participants were asked what was the percentage that they would decide to help this person (choices ranged from 0% to 100%, in 10% increments). Then, they rated their empathic concern toward the character of the vignette that they had read (in the scoring process, the researcher divided the percentage of participant's decision to help the person by 10 for more convenience).

Data Analysis

The data were analyzed using Statistical Package for Social Science (SPSS) version 15.0. Descriptive statistics such as means and standard deviations were employed. Since this study has a prior plan before the data were collected and it is to find the difference between pairs of mean, a priori comparison or multiple *t* tests with an alpha level of .01 were used.

Chapter 3

Results

This chapter describes the results from the statistical analyses. Findings of the two questions are addressed, and demographic information of participants is provided.

1. Demographic information of participants

Participants of the study were 201 (152 women and 49 men; aged 18-21) freshmen and sophomores of the Psychology Faculty at Chulalongkorn University. The demographic information of participants before allocation to high and low empathy groups would be presented in the Table 1.

Table 1. Number of participants before random assignment classified by sex and year in school.

	Male	Female	Total
Freshman	28	76	104
Sophomore	21	76	97
Total	49	152	201

After the allocation, the number of participants was reduced to 108 as presented in Table 2.

Table 2. Number of participants after the random assignment classified by sex, year in school, vignettes, and empathy levels.

		Freshmen		Sophomores		Total
		Male	Female	Male	Female	
Mental Vignette	High Empathy	2	11	2	12	27
	Low Empathy	5	8	3	11	27
Physical Vignette	High Empathy	2	11	5	9	27
	Low Empathy	7	7	5	8	27
Total		16	37	15	40	108

2. Research Question 1

To answer the research question 1 (*Do participants with high empathy decide to help the character of the mental problem vignette more than participants with low empathy?*), A null hypothesis (*Ho1: Participants with high empathy decide to help equally or less than participants with low empathy in the mental problem vignette*) was tested for this question.

Findings revealed the descriptive statistics of empathy and vignettes as shown in Table 3. To test the first hypothesis (*Ho1*) that the high empathic participants would decide to help the character in the vignette of mental problem equally or less than the low empathic participants, a priori comparison was conducted. As expected in the mental vignette condition, participants with high empathy rated their tendency to help the character significantly higher than participants with low empathy, $t(52) = 2.92, p < .01, d = .80$ (one-tailed).

Table 3. Mean and standard deviation of empathy and vignette on the decision to help

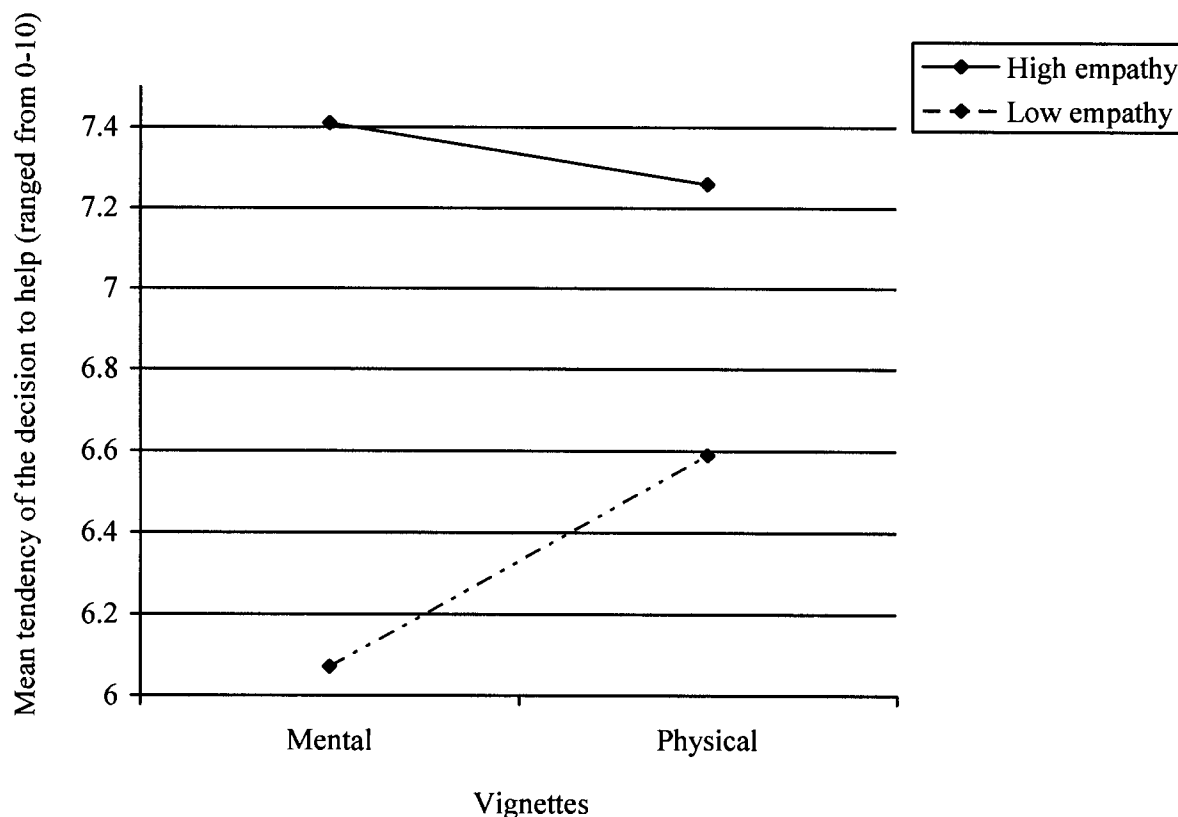
	Mental		Physical		Total	
	Mean	SD	Mean	SD	Mean	SD
High empathy	7.41	1.42	7.26	1.23	7.33	1.32
Low empathy	6.07	1.90	6.59	1.89	6.33	1.89
Total	6.74	1.79	6.93	1.61	6.83	1.70

Research Question 2

The other research question (*Is there any difference in the tendency to help the character of the physical vignette between participants with high empathy and participants with low empathy?*) was answered. The hypothesis (Ho2: *There is a difference between participants with high empathy and participants with low empathy in the tendency to help the character of the physical vignette*) was tested for this question.

The hypothesis (Ho2) is rejected. The difference of the decision to help the character with physical problem between high empathic participants and low empathic participants was not significant, $t(52) = 1.54, p > .05, d = .42$ (two-tailed). An additional analysis of a two-way ANOVA (see Figure 1) revealed that the main effect of empathy on the decision to help was significant, $F(1,104) = 10.10, p < .01, \eta^2 = .08$ (two-tailed). Therefore, there is a difference of the decision to help between high empathic participants and low empathic participants regardless of the condition of the vignette.

Figure 1. Effects of empathy on tendency to help in mental and physical vignettes

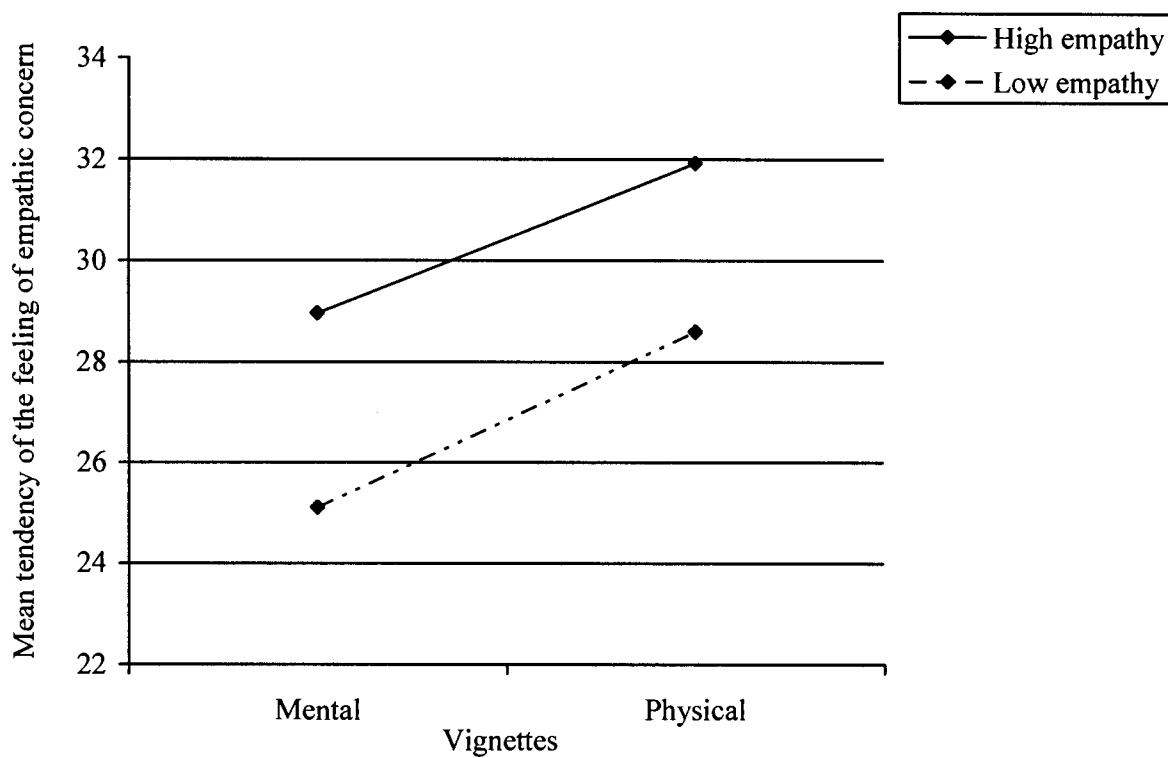


In addition, there was another dependent variable (the empathic concern) which could be analyzed. The descriptive statistics are shown in Table 4. After averaging six adjectives of empathic concern and computing the two-way ANOVA, the result showed that there was no interaction between empathy and the physical and mental vignettes, $F(1,104) = .06, p = .81$. However, the main effect of empathy was statistically significant, $F(1,104) = 10.97, p < .01, \eta^2 = .09$. Thus, there is a difference in empathic concern scale between high empathic participants and low empathic participants. The main effect of vignettes was also statistically significant, $F(1,104) = 8.81, p < .01, \eta^2 = .07$, which means that there is also a difference in empathic concern scale between the mental vignette and the physical vignette. In addition, the correlation between the empathic concern ($M = 28.65, SD = 6.07$) and the decision to help ($M = 6.83, SD = 1.70$) was statistically significant ($r = .49, p < .01$).

Table 4. Mean and standard deviation of empathy and vignette on the empathic concern

	Mental		Physical		Total	
	Mean	SD	Mean	SD	Mean	SD
High empathy	28.96	4.84	31.92	5.69	30.44	5.44
Low empathy	25.11	6.73	28.59	5.11	26.85	6.17
Total	27.03	6.12	30.26	5.61	28.65	6.07

Figure 2. Effects of empathy on empathic concern in mental and physical vignettes



Chapter 4

Discussion

The study aims to examine the effect of empathy and characteristics of two problems on prosocial behavior. According to the analysis in Chapter 3, the results are explained and discussed here.

Research Question 1

Question 1: Do participants with high empathy decide to help the character of the mental problem vignette more than participants with low empathy?

Hypothesis (H₀₁): Participants with high empathy decide to help equally or less than participants with low empathy in the mental problem vignette.

The result found that the hypothesis was rejected. Participants with high empathy decided to help the character of the mental problem vignette more than participants with low empathy ($p < .01$). This finding supported the prediction that people with high empathy have the tendency to help a distressed person in an ambiguous situation more than low empathic people. Since a mental problem is a diffuse subjective experience which cannot be adequately and precisely defined (Mee, Bunney, Reist, Potkin & Bunney, 2006), those with high empathy are more likely to perceive an ambiguous situation like a psychological need (Stuab, 2003). According to the study of Loggia, Mogil and Bushnell (2008), participants who had high levels of empathy could perceive painful and unpleasant stimuli more intensely than the low empathic ones. Therefore, participants who have high levels of empathy would better perceive the distress of the person with mental problem than participants with low levels of empathy. Moreover, a major depressive person is a stigmatized person who is usually labeled

as unpredictable and dangerous. As a result, the other people tend to increase a desire for social distance from that kind of person. However, empathy is the variable which can decrease the desire for social distance (Phelan & Basow, 2007). People with high levels of empathy have more positive attitudes toward a person with a mental health problem than people with low levels of empathy (Batson et al., 1997). Thus, not only would people with high empathy perceive the psychological need, but also may have a positive attitude toward people with severe mental health problem. It is not surprising that, in the present study, the high empathic participants decided to help more than the low empathic participants in the mental health vignette.

Research Question 2

Question 2: Is there any difference in the tendency to help the character of the physical vignette between participants with high empathy and participants with low empathy?

Hypothesis (Ho2): There is a difference between participants with high empathy and participants with low empathy in the tendency to help the character of the physical vignette.

The finding rejected the hypothesis because the difference of the decision to help the character with physical problem between high empathic participants and low empathic participants was not significant ($p > .05$). There were some explanations for the result. For instance, since the physical problem was less ambiguous than the mental problem, it was easier to perceive and understand the distress or the need of the person in that situation. Although people with low empathy would lack of the ability to feel and understand the feeling and thought of others, they could still perceive another's distress if it is obvious. Similar to the study of Stuab (2003), if another person's need is easily noticeable like physical distress, the ability to perceive it would not require any special skill. Therefore, to perceive the character's physical distress, high levels of empathy were not necessary.

Participants with high and low levels of empathy could perceive and understand the need of the character with a physical problem. Consequently, there was no difference between participants with high and low levels of empathy in the tendency to help the character in the physical vignette.

Apart from the main results, some additional findings will be discussed. First, the main effect of empathy on the decision to help was significant ($p < .01$). This result means that despite the vignettes, participants with high levels of empathy decided to help more than participants with low levels of empathy. It is congruent with a lot of studies that a person who has high levels of empathy or is induced to have high empathic feeling tends to help others more than those with low levels of empathy. For example, Dovidio et al. (2006) stated that people with high dispositional empathy would help more than those with low dispositional empathy. Moreover, Einolf (2008) found an association between empathic concern and spontaneous helping. Thus, the result of this study confirmed the findings of the previous studies.

Second, another variable named empathic concern was analyzed by a two-way ANOVA. Although the results showed that there was no interaction between empathy and vignettes on empathic concern, the main effect of empathy was significant ($p < .01$). In Table 4, it meant that participants with high empathy had the feeling of empathic concern more than participants with low empathy. This is not surprising because the independent variable (empathy) and the dependent variable (empathic concern) are the same factors but different patterns. Bierhoff (2002) said that empathy could be viewed as a state or a predispositional empathy like the feeling of empathic concern and it was also considered as a personality trait or a dispositional empathy like the independent variable in the present study. Consequently, it is normal that participants who were high in dispositional empathy would rate predispositional empathy higher than participants with low dispositional empathy. Moreover,

like the study by Loggia, Mogil and Bushnell (2008) which found that empathy affected people intensely to perceive a painful and unpleasant stimuli, the present study also showed that empathy affected the feeling of empathic concern toward another person's distress.

In addition to the empathic concern analysis, the result also showed that the main effect of vignettes was significant ($p < .01$). Table 4 revealed that participants in the physical problem vignette had the feeling of empathic concern more than participants in the mental problem vignette. This result supported the concept that people can be better in perceiving the need and the distress of others when the situation is clear and easy to understand (Stuab, 2003). Therefore, in the physical problem, participants rated the feeling of empathic concern higher than participants in the mental problem.

Lastly, the correlation between the empathic concern and the decision to help was positively significant ($p < .01$). It revealed that the greater the empathic concern, the more people tended to decide to help. This result could be explained like the result of the research question 1 that participants with high levels of empathy decided to help more than participants with low levels of empathy. The difference was that the empathic concern was the state of empathy and not a trait of personality.

In summary, the results showed that empathy and problem characteristics of a person in need affected prosocial behavior. People with high levels of empathy were more likely to decide to help the character in the mental problem than those with low levels of empathy. Moreover, in the physical problem, both high and low empathic people decided to help indifferently. Furthermore, the additional analyses also indicated that empathy and characteristics of problem influenced the feeling of empathic concern toward others.

Chapter 5

Summary

The purpose of the research

The study aims to investigate the effect of empathy and problem characteristics of the person in need on prosocial behavior of undergraduate students at Chulalongkorn University.

Research questions and hypotheses

Question 1: Do participants with high empathy decide to help the character of the mental problem vignette more than participants with low empathy? A null hypothesis (Ho1) will be tested for this question.

Ho1: Participants with high empathy decide to help equally or less than participants with low empathy in the mental problem vignette.

Question 2: Is there any difference in the tendency to help the character of the physical vignette between participants with high empathy and participants with low empathy? A null hypothesis (Ho2) will be tested for this question.

Ho2: There is a difference between participants with high empathy and participants with low empathy in the tendency to help the character of the physical vignette.

Research design

This research is a quasi-experiment which has empathy and characteristics of problem as the independent variables and prosocial behavior as the dependent variable.

Participants

Participants were 201 (152 women and 49 men; aged 18-21) freshmen and sophomores of the Psychology Faculty at Chulalongkorn University.

Instruments

1. A Thai version of the Basic Empathy Scale (Jolliffe & Farrington, 2006) which was developed by the researcher.
2. The mental and physical vignettes
3. A Thai version of The Empathic Concern

Procedures

1. Participants were allocated to high and low empathy groups after responding the Thai version of Basic Empathy Scale. Participants who scored equally or higher than 73th percentile rank of 201 participants were allocated to the high empathy group. The others who scored equally or lower than 23rd percentile rank were allocated to the low empathy group.

2. The mental and physical vignettes were alternated and systematically random and assigned to each participant. One participant would respond to one situation. Thus, there were 27 participants who responded the mental vignette and 27 participants who responded the physical vignette in both high and low empathy group.

3. Participants read the vignette and were asked what percentage chance you would decide to help this person (choices ranged from 0% to 100%, in 10% increments). They also rated their empathic concern toward the character of the vignette they had read.

Data Analysis

The data will be analyzed using Statistical Package for Social Science (SPSS) version 15.0. Descriptive statistics such as means and standard deviations will be employed. Since this study has a prior plan before the data have been collected and it is to find the difference between pairs of mean, a priori comparison or multiple *t* tests with an alpha level of .01 will be used.

Results

The obtained results are that:

1. Participants with high empathy decided to help the character of the mental problem vignette more than participants with low empathy significantly at the alpha level of .01.
2. The difference of the decision to help in physical problem between high empathic participants and low empathic participants was not significant at the alpha level of .05.

Implication of results

The findings of the study can be applied to benefit many organizations or settings. For example, in the counseling setting, to recruit or select the counselor appropriate for the client with psychological need, the high empathic person may be the better choice. In the social field, the results would be useful to explain the dynamic of society in helping others. To increase the assistance to a person with mental problem, the ambiguity of the need should be decreased by giving the knowledge about this kind of need to people so that they can understand this distress better.

Further research

Although the present findings suggested that empathy and problem characteristics of a person in need had an effect on prosocial behavior, the study could not specify that they were resulted only from the clarity of the situation. The study could only suggest the tendency that people with high empathy would decide to help more than people with low empathy in the mental vignette. There may be other variables that also affected the decision such as the lack of knowledge, and the past experience of participants. Thus, to improve the study, the researcher may control other variables that could influence prosocial behavior.

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Appendix

The Vignette

1. The Mental Vignette

Mary is a woman with a college education. For the past year, Mary has been feeling really down. She wakes up in the morning with a flat, heavy feeling that sticks with her all day long. She isn't enjoying things the way she normally would. In fact, nothing gives her pleasure. Even when good things happen, they don't seem to make Mary happy. She pushes on through her days, but it is really hard. She finds it hard to concentrate on anything. And even though Mary feels tired, when night comes, she can't go to sleep. Mary feels pretty worthless, and very discouraged. Mary's family has noticed that she hasn't been herself for about the last year and that she has pulled away from them. Mary just doesn't feel like talking.

2. The Physical Vignette

Mary is a woman with a college education. She has been blind since she was born. When she goes to anywhere, she would use the walking stick to lead her. Despite of her blindness, she can live on her own and do everything by herself. She does not feel that her handicap is the inferiority. Everyday she goes to the college with liveliness and cheerfulness. She intentionally listens to the lecturer and usually records what the teacher says to revise at home. Unfortunately in the examination period, she has to ask someone to read the books to her and sometimes no one offers that help.

Author information

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