### This Mediating Effect of Cognitive Emotion Regulation Strategies on the Impact of Perception on Behavior of Dating Violence in Male University Students

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#### ABSTRACT

The purpose of this study is to analyze the mediating effect of emotion regulation strategies student's perception of dating violence on dating violence behavior. The subjects were 233 male university students attending local universities in Korea. Data collection was conducted through a structured questionnaire to investigate dating violence awareness, dating violence behavior, and cognitive emotion control strategies. Data analysis was conducted with the SPSS/WIN 24.0 program. There was a significant negative correlation between dating violence perception and dating violence behavior of male university students. Second, Sobel test was conducted to verify the significance of the indirect effect of the dating violence perception on the dating violence behavior through the mediation variable (emotion regulation strategy). It was found that the decrease in the effect of male students' dating perception on dating violence behavior was significant. Based on the results of this study, it is necessary to develop and implement a dating violence prevention program based on a cognitive emotion regulation strategy.

**Keywords:** Male University students; Perception of dating violence; Behavior of dating violence; Cognitive emotion control strategies; Mediating effect

#### INTRODUCTION

Worldwide, unwanted sexual contact and heterosexual violence are rampant on university campuses. Violent behaviors of dating violence have been reported in various forms, including physical violence, emotion violence, sexual violence, cyber violence, behavior control, stalking (Straus, 2004). If dating violence is limited to physical violence, it can be estimated that 20-50% of university students experience dating violence (Lim, Jung, & Lee, 2010; Suk, 2002). However, in reality, most physical violence is accompanied by psychological and verbal violence (Archer, 2000), and dating violence against university students is expected to be more serious than reported. Dating violence can occur to both men and women, but based on studies (Suk, 2002; Archer, 2000) that most of the victims of dating violence are women, it can be seen that violence occurs in a gender power relationship, which is a typical aspect of gender violence.

Among the variables that can predict male students' inflicting behavior of dating violence revealed through prior research, the recognition of dating violence (Kim, Jung, & Lee, 2010) is emerging as a robust factor.

Violence perception refers to the degree to which the act is clearly perceived as violence in a violent situation. Intimacy and sexuality are premised on the relationship between men and women, so even if a violence situation occurs, victims are often reluctant to disclose themselves, and in many case they are not recognized as violence, resulting in repetitive situations. Analyzing factors affecting perception of dating violence among male university students to predict harmful behavior of dating violence provides a basis for developing intervention programs to predict and prevent dating violence this is a very important issue.

It is also a time when university students have a psychological burden to prepare for the future as they achieve basic developmental tasks such as self-realization and character maturity as an important transition from adolescence to adulthood. Emotion regulation strategies a very important role in this psychological burden or psychological adaptation. Emotion regulation is an important factor in predicting an individual's well-being, and failure in emotion regulation temporarily reinforces negative emotions such as anxiety and depression. In addition, if this situation continues, it may cause pathological conditions such as hyperactivity or behavior inhibition, and cause interpersonal problems (Garnrfski, Kraaij, & Spinhoven, 2001; Garnrfski et al., 2009). 'Emotion regulation' is the ability to properly adjust the inner emotion state to suit the situation and environment, and is defined as a process for searching, evaluating, and correcting an individual's emotion response (Thompson, 1994; Greenberg, Korman, & Paivio, 2002).

Cognitive emotion regulation strategy refers to cognitively dealing with emotion information experienced by oneself and is a concept similar to cognitive coping. Cognitive processes help regulate and handle our emotions or feelings and help keep emotions out of control or overexpression (Garnefski, Kraaij, & Spinhoven, 2001). The relationship between the opposite sexes in university is more closely related to emotion problems than any other problem, and appropriate coping strategies are needed in various conflict situations that may arise in social situations where opposite sexes interact. Garnefski and Kraaij(2006) classified cognitive emotion regulation strategies into 9 sub-factors into adaptive cognitive emotion regulation strategies. Among these, the five sub-factors of the adaptive cognitive emotion regulation strategy are acceptance, positive focus change, positive re-evaluation, rethinking of plans, and perspective expansion. The four sub-factors of maladaptive cognitive emotion regulation strategies are self-criticism, blame for others, rumination, and catastrophe.

As humans grow up and age, they use cognitive emotion adjustment strategies more from the perspective of external behavioral emotion regulation to explore cognitive emotion regulation strategies for university students. When they did, they needed to use a cognitive approach rather than a behavioral approach. Until now, the relationship between cognitive emotion regulation strategies and dating violence has been in the process of recognizing dysfunctional beliefs that are distorted by self-criticism, blaming others, rumination, and catastrophe in maladaptive strategies, and transferring negative emotions into action through cognitive judgment. The previous studies that play a role in inducing or alleviating dating violence have been dominated. As discussed above, it can be inferred that male university students' perceptions of dating violence and cognitive emotion regulation strategies will have the effect on the behavior of dating violence at the same time. Previous studies have fragmented the relationship between these variables, but in this study, it is assumed that the relationship that perception of dating violence affects dating violent assault behavior is mediated by cognitive and emotion regulation strategies. Have a differentiating point in understanding the relationship of the causes. In particular, this study attempted to identify the influence of the two variables on the behavior of dating violence by subdividing cognitive emotion regulation strategies into two dimensions: adaptive, maladaptive strategies, and verifying the mediating effects of each.

Based on the necessity and purpose of the study, a schematic of the research model of the mediating effect of emotion regulation strategies in the influence of male university students' perception of dating violence

on dating violence behavior is shown in Figure 1.

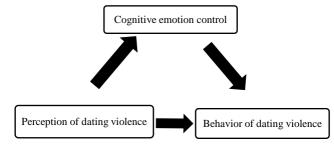


Figure 1. Intermediate model (Baron & Kenny, 1986)

The research questions set based on the theoretical background and research model of this study are as follows.

Research question 1. What is the relationship between male university students' perception of dating violence, emotion regulation strategies, and dating violence behavior?

- 1-1. What is the relationship between male university students' perception of dating violence and dating violence behavior?
- 1-2. What is the relationship between male university students' emotion regulation strategies and dating violence behavior?

Research question 2. What is the mediating effect of emotion regulation strategies in the relationship between male university students' perception of dating violence and dating violence behavior?

### MATERIALS & METHODED

#### Participant

The subject of this study is a random sampling of U University located in Chungbuk, Korea, and enrolled in five departments: Department of Social Welfare, Department of Police Fire Administration, Department of Sports, Department of Nursing, Department of Physical Therapy. It was targeted. Table 1 shows the general characteristics of the study subjects.

Characteristics	Categories	N	%
	school of police and fire administration	115	49.4
Major	department of health, such as nursing and physiotherapy	53	22.7
	department of Social Welfare, Counseling	65	27.9
Age	20 years and younger	104	44.6
	21~23 years	43	18.4
	24~26 years	86	36.9
	1	110	47.2
Grade	2	46	19.7
Glade	3	57	24.5
	4	20	8.6
Number of	0		2.6
heterosexual	1~3	112	48.1
relationships we	4~6	68	29.1

 Table1. The distribution of traits of study subjects (N=233)

have met so far	7~9		5.1
	Over 10	35	15.1
	yes	155	66.5
Sexual experience	no	78	33.5

#### Instruments

#### **Perception of dating violence**

To measure the perception of dating violence, a scale developed by Jeong (2013) was used. The items on the scale were 8 questions about emotion violence, perception about verbal violence (9 questions), perception about sexual violence (4 questions), perception about physical violence (7 questions), and perception about cyber violence (7 questions). Question consists of 5 sub-factors, a total of 35 questions. Each question is on a Likert 5-point scale, ranging from 'not absolute dating violence' (1 point) to 'very serious dating violence' (5 points), with a total score distribution of 35 to 175 points, and the higher the score, the more dating violence it means that perception is high. As for the reliability coefficient (Cronbach's  $\alpha$ ) in this study, the overall perception of dating violence was .97, and the sub-factors were perception of emotion violence .87, perception about verbal violence .82, perception about sexual violence .89, perception of physical violence was .80, and perception of cyber violence was .87.

#### Behavior of dating violence

In order to measure dating violence behavior, the revised Conflict Tactics Scales (CTS2) developed by Straus et al. This scale consists of a total of 22 questions and consists of three sub-factors: emotion violence (11 questions), physical violence (7 questions), and sexual violence (4 questions). Each question is a Likert 5-point scale response method, 'very often'(5 points), 'frequent' (4 points), 'sometimes' (3 points), 'rarely' (2 points), 'none' (1 point) , and the higher the score, the more violent behavior. In this study, as a result of calculating Cronbach's  $\alpha$ , which is a confidence level representing the degree of agreement between items on this scale, emotion violence was .90, physical violence was .86, sexual violence was .94, and the total was .92. appeared to be.

#### **Cognitive emotion regulation strategies**

To measure the cognitive emotion regulation strategy, the scale of Kim (2004), which adapted and applied the cognitive emotion regulation questionnaire of university students developed by Garnefski (2006), was used. This scale is divided into adaptive and maladaptive strategies. There are five sub-factors of adaptive emotion regulation: expanding outlook, acceptance, rethinking plans, positive focus change, and positive reevaluation. The sub-factors of maladaptive emotion regulation include self-criticism, blame others, rumination, and catastrophe. There are four. Each sub-factor consists of 4 questions. The higher the score, the higher the level of the corresponding adaptive and maladaptive strategies. The scale was an adaptive strategy (20 questions) and a maladaptive strategy (16 questions) among cognitive emotion regulation strategies, totaling 36 questions. Each question was rated on a 5-point Likert scale. Table 2 shows the details of specific sub-factors and the entire Cronbach's  $\alpha$ .

Categories	Contents	Item	Cronbach' $\alpha$				
Positive refocusing	Thinking more joyful and joyful to get out of trouble		.83				
Positive reappraisal	Thinking positively from the perspective of growth	4	.81				

<b>Table 2. The Characteristics</b>	of study subject	ts (N=233)
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Putting into perspective	Reducing what happened is a good thing, or evaluating the plan with relativity	4	.65	
Refocus on planning	ing Seeking ways to deal with the situation differently		.82	
Acceptance	Accepting what happened	4	.74	
Adaptive strategy	e strategy -			
Ruminating Rethinking my feelings in a situation about an event		4	.78	
Self blame	Blaming me for what happened	4	.74	
Blame others	Accidents that blame or blame others for what		.81	
Catastrophizing Emphasizing only bad memories of what happened		6	.80	
Maladaptive strategy		16	.90	
	36	.94		

#### Procedure and ethical considerations

This study was submitted with a research plan of the purpose, content, scope, and method of the research, and was approved by the University of Korea's IRB. The final questionnaire, which was supplemented and revised after completing the test sheet and verified for content validity by two experts, was sent to students from October 21 to November 15, 2019. Recovered after direct distribution. A total of 250 questionnaires were collected, but a total of 233(93.2%) questionnaires were applied to the final analysis, excluding questionnaires that were poorly described, such as a lot of silent and non-response. The time required for the survey is about 30 minutes.

#### Data analysis

The data collected in this study used the SPSS 20.0 statistical program. First, the frequency and percentage were calculated to analyze the general characteristics of male university students. Second, correlation analysis was conducted to find out the relationship between variables. Third, a simple regression analysis was conducted to analyze the effect of the perception of dating violence on the emotion regulation strategy and the effect of the emotion regulation strategy on the dating violence behavior. Fourth, a hierarchical multiple regression analysis was conducted according to Baron and Kenny's suggestion to verify the influence of dating violence perception on dating violence behavior through emotion regulation strategies, and Sobel verification to verify the significance of indirect effects was carried out.

#### **RESULTS AND DISCUSSION**

#### Descriptive statistics of measurement variables

Table 3 shows the average and standard deviation of male university students' perception of dating violence, emotion regulation strategies, and dating violence behavior.

#### Table 3. Dating Violence Perception, Emotion Regulation Strategy and Dating Violence Behavior

Categories			М	SD
Perception of	Emotion Violence	233	24.12	6.84
dating	Verbal Violence	233	31.35	7.34
violence	Sexual Violence	233	13.45	4.02

(N=233)

	Physical Violence	233	27.52	6.1
	Cyber Violence	233	24.97	6.58
	Total	233	121.4	27.55
	Positive refocusing	233	12.72	3.22
	Positive reappraisal	233	13.08	3.3
	Putting into perspective	233	12.08	2.78
	Refocus on planning	233	14.25	2.87
Emotion	Acceptance	233	12.23	2.87
Regulation	Adaptive strategy	233	64.36	12.62
Strategy	Ruminating	233	11.85	2.92
	Self blame	233	11.58	2.81
	Blame others	233	10.49	3.05
	Catastrophizing	233	10.06	3.22
	Maladaptive strategy	233	43.97	9.77
<b>.</b> .	Psychological violence	233	16.7	6.47
Dating Violence Behavior	Physical violence	233	8.12	2.92
	Sexual violence	233	4.52	1.76
	Total	233	29.33	10.12

#### **Relationship between variables**

#### Relationship between the subject's perception of dating violence and dating violence behavior

Table 4 shows the relationship between male university students' perception of dating violence and their behavior. As shown in Table 4, there was a significant negative correlation between male university students' perception of dating violence and dating violence behavior (r=-.21, p<.01). Specifically, perception of dating violence (r=-.15, p<.05), physical violence (r=-.22, p<.01), sexual violence (r=-.26, p<.001) showed a significant negative correlation.

 Table 4. Relationship between the subject's perception of dating violence and dating violence behavior (N=233)

		Dating Violence Behavior					
Categories		Psychological violence	Physical violence	Sexual violence	Total		
Emotion Violence		11	12	14*	13*		
Perception	Verbal Violence	13*	19**	-22**	18**		
of	Sexual Violence	12	15*	21**	16*		
dating violence	Physical Violence	19**	30***	34***	26***		
	Cyber Violence	13*	23***	26***	20**		
	Total	15*	22**	26***	21**		
*p<.05, **p<.01, *** p<.001							

# Relationship between the subject's perception of cognitive emotion control strategy and dating violence behavior

As shown in Table 5, there was a significant positive correlation between maladaptive strategies and dating violence behavior among male university students' cognitive emotion control strategies (r=.16, p<.05). Specifically, there was a significant positive correlation between maladaptive strategy and physical violence (r=.16, p<.05) and sexual violence (r=.20, p<.01). In particular, catastrophe and psychological violence (r=.16, p<.05), physical violence (r=.18, p<.01), sexual violence (r=.24, p<.001) and dating violence behavior (r=.20, p<.01) showed a significant positive correlation.

Categories	Psychological violence	Physical violence	Sexual violen ce	Total			
Positive refocusing	05	02	03	04			
Positive reappraisal	04	07	09	06			
Putting into perspective	.09	.01	.02	.06			
Refocus on planning	08	16*	16*	12			
Acceptance	.07	.05	.05	.07			
Adaptive strategy	01	05	06	03			
Ruminating	.07	.07	.10	.08			
Self blame	.04	.05	.10	.06			
Blame others	.10	.21**	.21**	.20**			
Catastrophizing	.16*	.18**	.24***	.20**			
Maladaptive strategy	.12	.16*	.20**	.16*			
*p<.05, **p<.01, *** p<.001							

 Table 5. Relationship between the subject's cognitive emotion control strategy and dating violence behavior (N=233)

There was a significant negative correlation between male university students' perception of dating violence and all sub-factors, including psychological violence, physical violence, and sexual violence, including all dating violence behavior. In other words, the lower the awareness of violence, the more the violence perpetrators tend to increase. These results are consistent with previous studies (Lim, Jung, & Lee, 2010; Archer, 2000; Kim, Koo, & Choi, 2020). Several studies are urging to improve awareness of dating violence. When dating violence is not recognized as violence, the path leading to the violence of dating has been revealed (Jung, Lim, & Lee, 2011). In other words, the lower the awareness of dating violence, the lower the quality of the relationship and the greater the risk of exposure to violent behavior. Therefore, it is necessary to focus on perception improvement education in a preventive approach. Especially for men, in conflict situations, open human beings can take into account little things that can happen while using violence as a means to control the behavior of the other person or to stick to their own opinions (Lim, Jung, & Lee, 2010) these cognitive improvement education is necessary. In addition, this study investigated only physical, emotion, sexual, and verbal violence when measuring the perception of dating violence. It is thought that it is necessary to develop the instrument that can reflect well. And there was a significant positive correlation between maladaptive strategies and total dating violence behavior among male university students' cognitive emotion regulation strategies. This means that the higher the maladaptive strategy of the cognitive emotion regulation strategy works, the more the dating violence behavior increases. In other words, maladaptive strategies can function as a variable that increases dating violence. These results are consistent with the study

of (Kim, 2019; Oliverous & Coleman, 2019) of university students. However, in this study, there was no relationship between maladaptive strategy and psychological violence, so it is necessary to accumulate empirical evidence for this later.

# The effects of dating violence perception and cognitive emotion control strategies on dating violence behavior

#### The effects of the subject's perception of dating violence and the dating violence behavior

Table 6 shows the effects of male university students' perception of dating violence on their dating violence behavior. According to Table 6, it was found that overall violence perception had a significant negative effect on all dating violence behaviors ( $\beta$ =-.21, p<.01), and explanatory power was 4% (F=10.51, p<. 01). The overall perception of violence was psychological violence ( $\beta$ =-.15, p<.05) with explanatory power of 2% of sub-factors, physical violence ( $\beta$ =-.22, p<.01) with explanatory power of 5%, and 7% of explanatory power was found to have a significant negative effect on sexual violence ( $\beta$ =-.26, p<.001).

## Table 6. The effect of the subject's perception of dating violence on the dating violence behavior (N=233)

(N=233)									
Dependent	Independent	В	SE	β	t	R	R2	F	
Developies	(Cont)	21.09							
Psychological violence	Perception of DV	04	.02	15	-2.37*	.15	.02	5.61*	
Dhysical	(Cont)	10.99							
Physical violence	Perception of DV	02	.01	22	-3.48**	.22	.05	12.13**	
Sexual	(Cont)	6.55							
violence	Perception of DV	02	.004	26	-4.15***	.26	.07	17.19***	
	(Cont)	38.64					.04		
Total	Perception of DV	08	.02	21	-3.24**	.21		10.51**	
	(Cont)	11.98	0.89						
	Emotion Violence	.04	.05	.08	.75				
Physical	Verbal Violence	001	.05	002	02				
violence	Sexual Violence	.11	.09	.15	1.31	.32	.1	5.28***	
	Physical Violence	17	.05	35	-3.22**				
	Cyber Violence	17	.05	15	-1.3				
Sevual	(Cont)	7.12	.53						
Sexual violence	Emotion Violence	.03	.03	.11	1.00	.35	.13	6.51***	

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	Verbal Violence	.003	.03	.01	.09					
	Sexual Violence	.03	.05	.06	.52					
	Physical Violence	11	.03	38	-3.55***					
	Cyber Violence	03	.03	11	97					
	(Cont)	41.22	3.11							
	Emotion Violence	.05	.16	.04	.33					
Total	Verbal Violence	.01	.18	.01	.04					
behavior of DV	Sexual Violence	.18	.3	.07	.61	.27	.07	3.58**		
-	Physical Violence	49	.18	3	-2.71**					
	Cyber Violence	.09	.18	06	54					
	* p<.05, ** p<.01, *** p<.001									

#### The effects of cognitive emotion control strategy on dating violence behavior

The results of investigating the effects of cognitive and emotion regulation strategies on dating violence among male university students are the same as in Table 7. Table7 shows that maladaptive strategies among cognitive-emotion regulation strategies have a significant static effect on overall dating violence ( $\beta$ =.16, p<.05), and explanatory power. Was 2% (F=5.71, p<.05). Specifically, the maladaptive strategy was physical violence ( $\beta$ =.16, p<.05) with an explanation power of 3%, and sexual violence ( $\beta$ =.20, p<.01) with an explanation power of 4%) Has a significant static effect. In particular, a sub-factor of maladaptive strategies appeared to have a significant static effect on catastrophic whole-dating violence ( $\beta$ =.21, p<.05), with an explanatory power of 5% (F= 2.70, p<.05). It appeared to have a significant static effect on catastrophic sexual violence ( $\beta$ =.23, p<.05) with an explanatory power of 7% (F=4.01, p<.01).

	ct of Cognitive E			i sti uteg	5 on Du		icites	Denavia
Dependent	Independent	В	SE	β	t	R	R2	F
Physical violence	(Cont)	6.04						
	Maladaptive strategy	.05	.02	.16	2.43*	.16	.03	5.92*
Sexual violence	(Cont)	2.93						
	Maladaptive strategy	.04	.01	.2	3.11**	.2	.04	9.64**
Total	(Cont)	22.23						
behavior of DV	Maladaptive strategy	.16	.07	.16	2.39*	.16	.02	5.71*

Table 7. The Effect of Cognitive Emot	ion Control Strategy on Date	Violence Behavior (N=233)

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Physical violence	(Cont)	6.44	.92				.05	3.18*
	Ruminating	05	.1	05	51			
	Self blame	06	.1	05	57	.23		
	Blame others	.16	.08	.17	2.06*			
	Catastrophizing	.13	.09	.14	1.47			
Sexual violence	(Cont)	3.27	.55				.07	4.01**
	Ruminating	05	.06	08	75	.26		
	Self blame	01	.06	01	15			
	Blame others	.06	.05	.11	1.34			
	Catastrophizing	.12	.05	.23	2.39*			
	(Cont)	24.18	3.19					
Total behavior of DV	Ruminating	12	.35	03	34		.05	2.70*
	Self blame	21	.34	06	62	.21		
	Blame others	.24	.27	.07	.89			
	Catastrophizing	.65	.3	.21	2.16*			
* p<.05, ** p<.01, *** p<.001								

It was found that male university students' perception of dating violence had a significant negative effect on dating violence behavior. Specifically, the perception of dating violence was found to have a significant negative effect on psychological, physical, and sexual violence. In the study of (Christina et al., 2016), the more the experiences of dating violence and the more the victim experiences, the less the perception of violence decreases. If dating violence is regarded as a trivial argument that can occur between couples, or is perceived as possible, self-check on cognitive structure should be prioritized. The results from previous studies show that when planning a dating violence prevention program, it is necessary to include psychological education as well as education that renews awareness of dating violence. In addition, since the perception of the severity of dating violence differs according to gender, and it was found that previous abuse and victim behavior experiences have an influence on the perception of dating violence (Christina et al., 2016) there is a need.

#### The mediating effects of emotion control strategy

As shown in Table 8, the analysis of Baron and Kenny (1986), which used hierarchical multiple regression analysis, was followed to find out whether the emotion regulation strategy plays a role as a mediating variable in the process of male university students' perception of dating violence affecting dating violence behavior. Table 8. Hierarchical multiple regression analysis to verify the mediating effect of catastrophe among

Verification phase of each model	В	SE	β	t	R	R <sup>2</sup>	F	
Step 1( $X \rightarrow M$ )								
M: Catastrophe	5.42							
X: Perception of DV	-0.01	0.004	-0.15	-2.27*	0.15	0.02	5.15*	

maladaptive emotion control strategies (N=233)

Step 2(X $\rightarrow$ Y)							
Y: Behavior of DV	38.64						
X: Perception of DV	-0.08	0.02	-0.21	-3.24**	0.21	0.04	10.51**
Step 3(M $\rightarrow$ Y)							
Y: Behavior of DV	20.93						
M: Catastrophe	2.05	0.44	0.29	4.68***	0.29	0.09	21.88***
Step 4(X, $M \rightarrow Y$ )							
Y: Behavior of DV	30.86						
M: Catastrophe	1.85	0.44	0.27	4.25***			
X: Perception of DV	-0.07	0.02	-0.2	-3.14**	0.35	0.12	16.29***
* p<.05, ** p<.01, *** p<.001							

It was found that among male university students' cognitive emotion regulation strategies, maladaptive strategies had a significant positive effect on dating violence behavior. Specifically, it was found that maladaptive transfer among cognitive emotion regulation strategies had a significant positive effect on physical violence and sexual violence. In this regard, as a result of examining whether cognitive emotion regulation strategies play a mediating role in the process of male university student's perception of dating violence influencing dating violence behavior, recognition of dating violence significantly explained catastrophe among the sub-factors of maladaptive emotion regulation strategies. In addition, catastrophic painting significantly explained dating violence, and when catastrophic painting was used as a mediating variable, the influence of the perception of dating violence on the behavior of dating violence decreased. Therefore, it can be seen that catastrophe among maladaptive emotion regulation strategies has a partial mediating effect in the influence of the perception of dating violence on the behavior of dating violence. In previous studies, it is partially consistent with studies (Seo, 2011) that argued that blaming others and catastrophe among maladaptive strategies are related to dating violence. Catastrophe is a factor that expresses anxiety as aggression, and behavior based on negative emotions can be considered very dangerous in that the cognitive structure and influence of dysfunctional beliefs induce dating violence. In particular, when catastrophicization is used as a mediating variable, it can be interpreted as meaning that catastrophicization can have an effect on date violence behavior as a causal factor, considering that the perception of date violence decreases in the influence of date violence behavior. Through this study, it was possible to find out the causal structure of the cognitive emotion regulation strategy in the relationship between the perception of dating violence and the behavior of dating violence. As a result of the study, in a mediated analysis of male university students, all the sub-factors of cognitive emotion regulation strategies did not have a significant result in the relationship between the perception of dating violence and the behavior of dating violence. This suggests that there is a lack of proactive learning to do and control emotions. In addition, the fact that catastrophe, which is a maladaptive strategy of male university students, has a partial mediating effect, is predicted that rejection, anxiety about rejection, and conflict felt in romantic relationships are expressed as

catastrophicization, which is a maladaptive strategy, triggering dating violence. The frequent use of catastrophe in emotion regulation means that the person's low self-esteem and anxiety dominate, and to resolve this, pay attention to their inner experiences and empathize with what is important and meaningful to them.

#### CONCLUSION

The significance of this study is as follows. First, by examining the relationship between cognitive emotion regulation and violence perception and behavior, it was possible to gain an in-depth approach to the cause and background of dating violence. Second, in this study, it was confirmed that the perception of dating violence has the effect on perpetrating behavior, and it was proved that catastrophe among cognitive emotion regulation is a mediating variable. Based on the discussion and results, the limitations identified and suggestions for further research are described. In the data collection of this study, since the research was conducted for university students in a limited area, there is a limit to generalizing the research results, and in-depth research in consideration of demographic characteristics is required for university students and ordinary people in various areas. Second, in this study, only male students were studied, but it is necessary to include female students together to find out strategies for emotion cognitive control between couples. Furthermore, there is a need for a program that can practice planning and implementing cognitive emotion regulation strategies so that negative situations can be resolved in a healthy way when faced with conflict situations in a dating relationship.

#### References

• Archer J., 2000. Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin*, 126(5), pp.651–680. DOI: 10.1037/0033-2909.126.5.651

• Christina M.D., Katie M.E., Erika L.K. and Christine A.G., 2016. Perceptions of dating violence and associated correlates: a study of university young adults. *Journal of Interpersonal Violence, Sep*, 29. pp. 1-27. DOI: 10.1177/0886260515597439

• Garnefski N., Koopman H., Kraaij V. and Cate R., 2009. Brief report: Cognitive emotion regulation strategies and psychological adjustment in adolescents with a chronic disease. *Journal of Adolescence*, 32(2), pp.449-454. DOI:10.1016 /j.adolescence.2008.01.003

• Garnefski N. and Kraaij V., 2006. Cognitive emotion regulation questionnaire development of a short 18-item version (CERQ-short). *Personality and Individual Differences*, 41(6), pp.1045-1053. DOI:10.1016/j.paid.2006.04.010

• Garnefski N., Kraaij V. and Spinhoven P., 2001. Negative life events, cognitive emotion regulation and emotion problems. *Personality and Individual Differences*, 30(8), pp.1311-1327. DOI: 10.1016/S0191-8869(00)00113-6

• Greenberg L.S., Korman L.M., and Paivio S.C., 2002. Emotion in humanistic psychotherapy. In D. J. Cain (Ed.), *Humanistic psychotherapies: Handbook of research and practice*, pp.499–530. American Psychological Association. DOI: 10.1037/10439-016

• Jeong H.Y., 2013. Development and evaluation of REBT-based dating violence prevention program for middle school students. Ph.D dissertation, University of Donga, Pusan.

• Jung S.Y., Lim C.Y. and Lee M.S., 2011. The effects of prejudice on dating violence and the mediating effects of the violence acceptability and the relationship conflict. *Social Science Research Review*, 27(4), pp.127-151.

• Kim J.R., 1999. University students' dating violence and coping behavior. Ph.D dissertation. University of Cheonnam, Gwangju.

• Kim S.H., 2004. A study on relationships among the stressful events, cognitive emotion regulation strategies and psychological wellbeing. Master's thesis. University of Catholic, Seoul.

• Kim S.B., 2019. The mediating effect of cognitive emotion regulation strategies on the relationship between rejection sensitivity and dating violence of university students. Master's thesis, University of Soongsil, Seoul.

• Kim R.E., Koo S.M. and Choi S.M., 2020. The differences in harassment behavior and perception of dating

violence according to traits of university students. *Journal of the Korea Academia Industrial Cooperation Society*, 21(7), pp.244-254. DOI: 10.5762/KAIS.2020.21.7.244

• Lim C.Y., Jung S.Y. and Lee M.S., 2010. The effects of violence perception on dating violence and the moderating effects of relationship satisfaction. *Journal of Community Welfare*, 35, pp.147-179.

• Oliveros A.D., and Coleman A.S., 2019. Does emotion regulation mediate the relation between family-of-origin violence and intimate partner violence? *Journal of Interpersonal Violence, Aug,* 12. DOI: 10.1177/0886260519867146

• Seo S.G., 2011. The mediational roles of maladaptive cognitive strategies and interpersonal relationships between irrational beliefs and aggression. *Korean Journal of Counseling and Psychotherapy*, 23(4), pp.901-919.

• Straus M.A., 2004. Prevalence of violence against dating partners by male and female university students worldwide. *Violence Against Women*, 10, pp.790-811. DOI: 10.1177/1077801204265552

• Straus M.A., Hamby. S.L. and Boney. S., 1996. The revised conflict tactics scales (CTS2) development and preliminary psychometric data. *Journal of Family Issues*, 1, pp.283-316. DOI: 10.1177/019251396017003001

• Suh K.H., 2002. The role of anger and variables from social learning theory in inflicting dating violence among adolescents. *Korea Journal of Culture and Social Issues*, 8(2), pp.1-15.

• Thompson R.A., 1994. Emotion regulation: A theme in search of definition. *Monographs of the Society for Research in Child Development*, 59, pp.25-52. DOI: 10.2307/1166137