

## A Structural Relationship between Perfectionism, Dance Commitment, Career Decision Self-Efficacy, and Dance Achievement of Middle and High School Students Majoring in Dance \*

Yun-Mi Min<sup>1</sup>

<sup>1</sup>Ph. D. course. Of Dance, Dankook University, Korea  
[to.minyoonmi@gmail.com](mailto:to.minyoonmi@gmail.com)

### Abstract

The purpose of this study is to analyze the structural relationship among perfectionism and dance achievement of middle and high school students majoring in dance. Specifically, this study aims to investigate the effects of perfectionism on dance achievement through the medium of dance commitment and career decision-making self-efficacy. For this purpose, a structural equation model based on the previous studies was constructed with perfectionism as an exogenous variable and dance commitment, career decision-making self-efficacy, and dance achievement as endogenous variables. The final subjects of this study were 279 middle and high school students majoring in dance. The data were processed by frequency analysis to find out personal characteristics using SPSS 23 and exploratory factor analysis and reliability analysis were conducted on the research tools. In addition, AMOS 21 was used for confirmatory factor analysis, correlation analysis and structural equation model analysis. As a result of data processing on the research model. First, the sub-dimensions of perfectionism tendency 'worry about mistakes', 'personal standard', and 'doubt about behavior' had a statistically significant effect on dance commitment. Second, the sub-dimensions of perfectionism 'worry about mistakes', 'personal standard', and 'doubt about behavior' had statistically significant effects on career decision-making self-efficacy. Third, dance commitment did not have a statistically significant effect on dance achievement, but career decision-making self-efficacy had a statistically significant effect on dance achievement. These results provide implications.

**Keywords:** Perfectionism, Dance Commitment, Career Decision Self-Efficacy, Dance Achievement

## 1 . Introduction

Perfectionism refers to an attitude that seeks perfection without flaws in the dictionary. More specifically, it means a state of having a perfect goal, the state of one's life being perfectly accomplished with the mind or thought.

Such perfectionism is inevitably strong in dancers as well, and related studies are being conducted in various ways. For this reason, dancers practice repetitively in order to perform on stage beyond the practice process

where they would have performed at their best. Dancers put a lot of effort over a long period of time to achieve the best performance in practice, and in the process, they experience various psychological changes such as immersion, tension, and achievement. In this process, negative anxiety factors in dance performance are resolved, and as they strive to become more perfect, they develop a tendency toward perfectionism [1].

The tendency toward perfectionism can have negative as well as positive effects on dancers [2]. The reason for this is that they set excessive personal standards and pursue perfection at the highest level, and when they fall short of these standards, they may exhibit a tendency to become excessively self-critical, and have the characteristic of never admitting even the slightest imperfection. If the tendency toward perfectionism is excessively high, it can negatively affect not only the individual but also the dance company.

The positive and negative aspects of such perfectionism tendencies are inherent, and due to the desire, effort, and goal of a dancer to pursue a perfect performance, it has been studied for various age groups and occupational groups [3-5]. Therefore, this study aims to provide implications by constructing a structural equation model and conducting empirical research on what kind of causal relationship there is to dance achievement through dance immersion and career decision self-efficacy, which have not been comprehensively addressed in these research trends.

## **2. Study Hypothesis**

The current study established hypothesis based on theoretical bases from previous literature. The causal relationships among fan experience, fan satisfaction, team attachment, psychological well-being, team loyalty and quality of life were the focus of the study. The following sections discuss the detailed relationship between these concepts, based on the model of the current research.

### **2.1 Relationship Between Perfectionism and Dance Commitment**

The perfectionism of middle and high school students majoring in dance will affect dance commitment; this relationship can be confirmed as a result of previous studies on perfectionism and dance commitment. Shin reported that perfectionism had a significant effect on dance commitment in the study on the effect of perfectionism of high school girls majoring in dance, and Seong reported that perfectionism of high school students majoring in dance had a significant effect on dance commitment [6-7]. In addition, in the study on the effect of Min & Yu's perfectionism tendency on competition anxiety and dance commitment, it was reported that the perfectionism tendency of middle and high school students majoring in dance affects dance commitment [8]. Based on these previous studies, the following hypotheses were set up.

Hypothesis 1. Perfectionism will have a significant effect on dance commitment.

### **2.2 Relationship Between Perfectionism and Career Decision Self-Efficacy**

Perfectionism will affect career decision-making self-efficacy. In this regard, Lee and Kim reported that perfectionism tendencies had a significant effect on career decision-making self-efficacy in the relationship between perfectionism tendencies, social support, and career decision-making self-efficacy of dance major college students [9]. In the study on the effect of perfectionism tendencies of Suk and Cho college students on career decision-making self-efficacy, it was found that the more the college students pursued adaptive perfectionism tendencies, the more positive influence on planning and problem solving, which are sub-variables of career decision-making self-efficacy [10]. Based on these previous studies, the following hypotheses were set up.

Hypothesis 2. Perfectionism will affect career decision-making self-efficacy.

### 2.3 Relationship Between Dance Commitment and Dance Achievement

Dance commitment will affect dance achievement. In this regard, Jung and Min showed that competition anxiety of high school students majoring in dance had an effect on dance commitment and dance achievement, and competition anxiety had an effect on dance immersion and dance achievement [11]. In the relationship between dance confidence, dance commitment, and dance ability achievement of Lee's college students majoring in dance, dance commitment was reported to have an effect on dance ability achievement [12]. Based on these previous studies, the following hypotheses were set up.

Hypothesis 3. Dance commitment will affect dance achievement.

### 2.4 Relationship Between and Career Decision Self-Efficacy and Dance Achievement

Career decision self-efficacy will affect dance achievement. In this regard, the relationship between perceived parental career support and academic achievement of Choi and Lee high school students showed that the students with high career maturity, which includes career decision efficacy as a mediating effect of career decision self-efficacy, had high academic achievement level [13]. In addition, in the effect of Lee's social support on the self-efficacy and dance achievement of dance majors in art high schools, the self-efficacy of dance majors in art high schools contributed to the improvement of dance achievement [14]. Based on these previous studies, the following hypotheses were set up.

Hypothesis 4. Career decision self-efficacy will affect dance achievement.

The following Figure 1 shows a model built around the hypothesis of this study

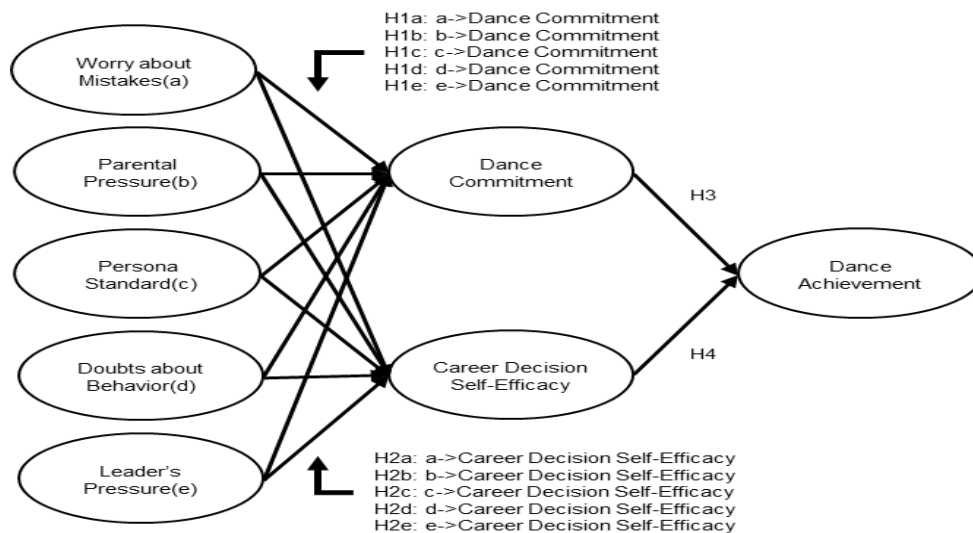


Figure 1. Study model

## 3. Research Method

### 3.1 Research Subjects

In this study, middle and high school students majoring in dance, who are currently majoring in dance, were selected as the population, and the data were collected using the non-probability sampling method, the significance sampling method. A total of 285 data were collected, and 6 samples with insincere or unclear responses were excluded from the collected data, and a total of 279 samples were analyzed.

### 3.2 Research Tools

In this study, the questionnaire was used as a research tool. The questionnaire used in the previous studies was modified and supplemented to suit the purpose of the study. The questionnaire consisted of 4 questions to measure the gender, school level, major, and dance career of personal characteristics, 14 questions to measure perfectionism tendency as independent variables, 11 questions to measure dance commitment as mediating variables, 11 questions to measure career decision-making self-efficacy, 2 questions to measure dance achievement as dependent variables, and 42 questions in total.

## 4. Results

### 4.1 Analysis of validity and reliability of endogenous variables

In order to items parceling considering the simplicity of the measurement model, exploratory factor analysis was conducted on dance commitment and career decision-making self-efficacy, which are multidimensional endogenous variables. The exploratory factor analysis method was used using the varimax, which is a right angle rotation, and more than 0.5 factors were selected. First, exploratory factor analysis of dance commitment satisfied the test criteria of KMO and Bartlett, and analyzed with two dimensions and 12 questions. The following career decision-making self-efficacy was satisfied with the test criteria of KMO and Bartlett, and analyzed with four dimensions and 11 questions.

In all factors shown in Table 1, Table 2, the value of Cronbach's is presented by Song at .6 or more to demonstrate the internal consistency of all factors [15].

**Table 1. Exploratory factor analysis and reliability of dance commitment**

Item	Cognitive commitment	Behavioral commitment	$h^2$	Cronbach' $\alpha$
1	<b>.829</b>	.058	.690	
2	<b>.821</b>	.165	.702	
3	<b>.786</b>	.195	.656	
4	<b>.764</b>	.293	.669	.904
5	<b>.741</b>	.331	.658	
6	<b>.715</b>	.220	.560	
7	<b>.669</b>	.365	.581	
8	.329	<b>.779</b>	.715	
9	.188	<b>.750</b>	.598	
10	.056	<b>.642</b>	.415	.714
11	.260	<b>.627</b>	.461	
Eigenvalue	4.285	2.419		
Variance(%)	38.957	21.994		
Accumulation(%)	38.957	60.951		

Kaiser-Meyer-Olkin=.889 Bartlett's test=1536.354,  $df=55$ ,  $sig=.000$

**Table 2. Exploratory factor analysis and reliability of career decision-making self-efficacy**

Item	Job information	Future plan	Problem solving'	Goal selection	<i>h</i> <sup>2</sup>	Cronbach' $\alpha$
1	<b>.744</b>	.258	.030	.178	.653	
2	<b>.736</b>	.061	.192	.040	.584	.659
3	<b>.647</b>	.288	.173	.045	.534	
4	.225	<b>.823</b>	.129	-.036	.746	
5	.154	<b>.720</b>	.007	.334	.653	.737
6	.213	<b>.706</b>	-.010	.297	.632	
7	-.001	.183	<b>.845</b>	-.048	.751	
8	.150	.007	<b>.789</b>	.015	.646	.737
9	.356	-.077	<b>.673</b>	.159	.611	
10	.088	.238	.009	<b>.896</b>	.868	.603
11	.513	.290	.166	<b>.520</b>	.647	
Eigenvalue	2.055	2.027	1.903	1.338		
Variance(%)	18.685	18.429	17.298	12.168		
Accumulation(%)	18.685	37.113	54.412	66.579		

Kaiser-Meyer-Olkin=.823 Bartlett's test=5850.490, *df*=55, *sig*=.000

#### 4.2 Analysis of validity and reliability of measurement model

The parceling of items was conducted based on the results of exploratory factor analysis on endogenous variables such as dance commitment and career decision-making self-efficacy. In order to verify the suitability of the measurement model, confirmatory factor analysis was conducted on the measurement model consisting of five sub-dimensions of perfectionism, dance commitment, career decision-making self-efficacy, and dance achievement. The measurement model was modified by removing items that hinder validity. The optimal conditions of the structure were confirmed by evaluating the fitness of confirmatory factor analysis. In Table 3, the results, variable composition and results were presented.

The confirmatory factor analysis showed that the suitability was satisfactory for TLI=.953, CFI=.964, RMSEA=.045 and SRMR=.042. In addition, all the scores of the standardized regression weights(over .5), the value of average variance explained (AVE) and construct reliability (over .7) were more than the standard value showing the satisfactory convergent validity [16-18].

Fornell & Larcker stated that there is discriminant validity between the two constructs if the value of AVE of each construct is more than the squared value of the correlation coefficient [19]. Therefore, the value of AVE presented in Table 4 was compared with the squared value of the correlation coefficient of each concept in the correlation analysis. As a result of the review, it was found that these criteria were not met only in the case of self-efficacy in decision-making and self-efficacy. However, it was found that the correlation coefficient  $\pm 2 \times$  standard error, which is another criterion for measuring discriminant validity, does not contain 1 (correlation coefficient .797, standard error .059). Another criterion, the constrained model and the unconstrained model, satisfies the criterion for whether the chi-square difference is significant (chi-square difference 19.816, *sig* = .000), so it was judged that the discriminant validity of the overall measurement model was satisfied. After the verification of convergent validity and discriminant validity, Cronbach's  $\alpha$  testing was conducted for the verification of the reliability of the internal consistency of each factor. As can be seen in Table 2, the Cronbach's  $\alpha$  value for all factors is above .7 as suggested by Nunnally & Bernstein, which was presented earlier, demonstrating the internal consistency of all factors [20].

**Table 3. Confirmatory factor analysis and reliability of measurement model**

Factors	Item	B	$\beta$	s.e variance	t	AVE	C.R	Cronbach's $\alpha$	
Perfectionism	Worry about mistakes1	1	.739	.454		.572	.842	.841	
	Worry about mistakes2	1.065	.762	.419	12.147***				
	Worry about mistakes3	1.028	.729	.469	11.626***				
	Worry about mistakes4	1.051	.793	.371	12.623***				
	Parental pressure1	1	.874	.236		.650	.847	.843	
	Parental pressure2	.738	.800	.360	14.517***				
	Parental pressure3	.753	.739	.454	13.294***				
	Personal standards1	1	.800	.360		.579	.733	.727	
	Personal standards2	.780	.720	.482	9.174***				
	Career decision self-efficacy	Doubts about behavior1	1	.872	.240		.696	.872	.868
		Doubts about behavior2	1.008	.882	.222	17.117***			
		Doubts about behavior3	.789	.742	.449	14.061***			
Leader's pressure1		1	.812	.341		.654	.791	.790	
Leader's pressure2		1.059	.806	.350	11.386***				
Problem solving <sup>a</sup>									
Dance commitment	Goal selection	1	.747	.442		.513	.759	.756	
	Job information	.875	.644	.585	9.721***				
	Future plan	1.107	.752	.434	11.122***				
Dance achievement	Cognitive commitment	1	.662	.562		.551	.709	.699	
	Behavioral commitment	1.115	.815	.336	9.104***				
Dance achievement	Dance Achievement1	1	.807	.349		.602	.752	.750	
	Dance Achievement2	1.123	.744	.446	8.338***				

\*\* $p < .01$ , <sup>a</sup> validity impediment item removal

**Table 4. Correlation analysis of measurement model**

Factors	Worry about mistakes	Parental pressure	Personal standards	Doubts about behavior	Leader's pressure	Dance Commitment	Career Decision Self-Efficacy	Dance Achievement
Worry about mistakes	1							
Parental pressure	.631**	1						
Personal standards	.654**	.352**	1					
Doubts about behavior	.538**	.396**	.251**	1				
Leader's pressure	.676**	.554**	.420**	.550**	1			
Dance Commitment	.057	-.125	.333**	.053	.020	1		
Career Decision Self-Efficacy	-.141	-.261**	.195*	.006	-.092	.797**	1	
Dance Achievement	-.101	-.181	.080	-.134	-.167*	.474**	.628**	1

\* $p < .05$ , \*\* $p < .01$

### 4.3 Hypothesis verification result

As a result of verification of hypothesis 1a ~ hypothesis 1e regarding the relationship between the sub-dimensional of perfectionism and dance commitment, worry about mistakes, personal standards, and doubts about behavior dimensional were found to have a causal relationship with dance commitment. Next, as a result of verification of hypothesis 2a ~ hypothesis 2e regarding the relationship between the sub-dimension of perfectionism and career decision-making self-efficacy, worry about mistakes, personal standards, and doubts about behavior dimension were found to have a causal relationship with career decision-making efficacy. Hypothesis 3 on the relationship between dance commitment and dance achievement had no causal relationship, and Hypothesis 4 on career self-determination efficacy and dance achievement had a causal relationship. The specific results are as shown in <Table 5>.

**Table 4. Hypothesis verification result**

	Hypothesis		Regression Weights	Standardized regression weights	Standard error	C.R	Result	
H1a	Worry about mistake	→	Dance Commitment	-1.217	-2.102	.306	-3.972***	O
H1b	Parental pressure	→	Dance Commitment	.074	.160	.099	.748	×
H1c	Personal standards	→	Dance Commitment	1.251	1.957	.254	4.923***	O
H1d	Doubts about behavior	→	Dance Commitment	.251	.505	.097	2.588**	O
H1e	Leader's pressure	→	Dance Commitment	.076	.141	.128	.598	×
H2a	Worry about mistake	→	Career Decision Self-Efficacy	-1.399	-2.296	.335	-4.179***	O
H2b	Parental pressure	→	Career Decision Self-Efficacy	.066	.134	.106	.618	×
H2c	Personal standards	→	Career Decision Self-Efficacy	1.308	1.944	.268	4.884***	O
H2d	Doubts about behavior	→	Career Decision Self-Efficacy	.288	.551	.103	2.787**	O
H2e	Leader's pressure	→	Career Decision Self-Efficacy	.077	.135	.135	.573	×
H3	Dance commitment	→	Dance Achievement	-.109	-.080	.208	-.524	×
H4	Career decision self-efficacy	→	Dance Achievement	.881	.682	.207	4.262***	O

\*p<.05, \*\*p<.01, \*\*\*p<.001 /  $\chi^2=294.149$ , p=.000, TLI=.938, CFI=.951, RMSEA=.052, SRMR=.047

## 4. Conclusion

The study was conducted on perfectionism and performance variables of middle and high school dance majors to achieve the accumulation of research results. In summary, among the five dimensions of perfectionism, 'worry about mistakes' had a negative effect on two mediators, and 'personal standard' and 'doubt about behavior' had a positive effect on two mediators. This means that perfectionism tendencies can have positive and negative effects on major performance variables.

Therefore, dance instructors need to recognize this point and teach students and teach dance members. Because dance represents the form of performance shown to the audience, it pursues perfect performance without mistake. This can increase the satisfaction of performers and audiences through better quality performances, but the strong burden of performers in preparation can have a negative impact on psychological

contraction and emotional negative effects, as well as negative effects on performance programs and dancers as a whole.

Also, in terms of the result that career decision-making self-efficacy has a positive effect on dance achievement rather than dance commitment, it is judged that dance leaders of middle and high schools should be able to increase dance achievement of dance major students through education and guidance that can increase self-efficacy on career decision based on understanding of dancer's perfectionism tendency

## References

- [1] H. K. Shin, "Relationships among Perfectionism Inclination, Self-management, Dance Stress and Dance Commitment of Female High School Students Majoring in Dance," *Unpublished doctoral dissertation*. Graduate School of GongJu University, GongJu, Korea, 2018.
- [2] H. K. Lee, "The Relationships between Dance Perfectionism and Physical Health: A Mediated Effect of Positive and Negative Affect," *Korean Journal of Sport Psychology*, Vol. 22, No. 4, pp. 57-68, Nov 2011.
- [3] A. R. Lee, "The Mediating Effect of Self-compassion on the Relationship between Multidimensional Perfectionism and Burnout of Dance Major," *Unpublished master's dissertation*. Graduate School of Ewha Womans University, Seoul, Korea, 2020.
- [4] J. H. Jo, "The Effects of Perfectionism Tendency and Competition Discomfort in the High School Students Majoring in Dancing on Eating Disorder," *The Korean Journal of Physical Education*, Vol. 59, No. 3, pp. 335-347, May 2020. DOI : [10.23949/kjpe.2020.5.59.3.335](https://doi.org/10.23949/kjpe.2020.5.59.3.335)
- [5] H. J. Kim, and D. J. Kim, "Relationship among Perfectionism, Self-Management, and Stage Anxiety of Professional Dancers," *Journal of Sport and Leisure Studies* Vol. 75, pp. 225-235, Feb 2019. DOI : [10.51979/KSSLS.2019.02.75.225](https://doi.org/10.51979/KSSLS.2019.02.75.225)
- [6] H. K. Shin, "The Influence of perfectionism on self-management and Commitment in dance for female high school students majoring in dance," *Korean Journal of Dance*, Vol. 20, No. 2, pp. 127-137, Jul 2020. DOI : [10.26743/kaod.2020.20.2.011](https://doi.org/10.26743/kaod.2020.20.2.011)
- [7] J. S. Seong, "Effects of Arts High School Students' Perfectionism Inclination on Dance Flow Physical Self-efficacy," *Master's thesis*. The Graduate School of Education Yonsei University, Seoul, Korea, 2016.
- [8] Y. M. Min, and Y. J. Yu, "The Perfectionist Tendencies of Middle and High School Students who Major in Dance Impact on Competitive Anxiety and Dance Immersion," *Journal of digital convergence*, Vol. 19, No. 7, pp. 289-301, Sep 2021. DOI : [10.14400/JDC.2021.19.7.289](https://doi.org/10.14400/JDC.2021.19.7.289)
- [9] K. E. Rhee, and N. S. Kim, "A Relationship Between Perfectionist Inclination, Social Support, and Career Decision-Making Self-Efficacy of Undergraduate Students Majoring in Dance," *The Korean Society of Dance*, Vol. 78, No. 6, pp. 179-195, Dec 2020. DOI : [10.21317/ksd.78.6.11](https://doi.org/10.21317/ksd.78.6.11)
- [10] M. S. Suk, and O. S. Cho, "The Effects of Perfectionism on Career Decision-making of Self-Efficacy of University Students : The Moderating Effects of Extracurricular Club activity Satisfaction," *Korea Youth Research Association*, Vol. 24, No. 8, pp. 195-210. Aug 2017. DOI : [10.21509/KJYS.2017.08.24.8.195](https://doi.org/10.21509/KJYS.2017.08.24.8.195)
- [11] Y. J. Jung, and Y. M. Min, "The Influence of Competition Uncertainty on Dancing High School Students' Impacts on Dancing Immersion and Achievement," *Journal of Digital Convergence*, Vol. 18, No. 9, pp. 441-451, Sep 2020. DOI : [10.14400/JDC.2020.18.9.441](https://doi.org/10.14400/JDC.2020.18.9.441)
- [12] J. Y. Lee, "The Relationship of Dance Confidence, Dance Flow and Dance Ability Achievement of University Students Majoring in Dance," *Korean Society of Dance Science*, Vol. 33, No. 2, pp. 29-40, Apr 2016. DOI : [10.21539/ksds.2016.33.2.29](https://doi.org/10.21539/ksds.2016.33.2.29)
- [13] S. M. Choi, and D. H. Lee, "The Mediation Effect of Career Decision Self-Efficacy in the Relationship of Parental



- Career Support and Academic Achievement of High School Students,” *Journal of Education & Culture*, Vol. 23, No. 5, pp. 295-318, Sep 2017. DOI : 10.24159/joec.2017.23.5.295
- [14] H. N. Lee, “Effect of Social Support in Art High School to Self-efficiency and Dance Achievement,” *The Korean Society of Dance*, Vol. 73, No. 2, pp. 105-122, Apr 2015. UCI : G704-000824.2015.73.2.005
- [15] J. J. Song. “*SPSS/AMOS Statistical Analysis Method for Paper Writing*,” 21st century company. 2008.
- [16] K. S. Kim, “*AMOS 18.0 structure equation model analysis*,” Hannarae Publishing, 2010.
- [17] J. F. Hair, R.E. Andreson, R.L. Tatham and W.C. Black, “*Multivariate data analysis*,” Englewood Cliffs, 1998.
- [18] B. R. Bae, “*Amos 24 Structural equation modeling*,” Cheongram, 2017.
- [19] C. Fornell and D. F. Larcker, “Evaluating structural equation models with unobservable variables and measurement error,” *Journal of Marketing Research*, Vol. 18, No. 1, pp. 39-50, Feb 1981.
- [20] J. C. Nunnally and I. H. Bernstein, “*Psychometric theory*,” McGraw-Hill. 1994.