



Original Article

# Effects of A Qigong Training Program on the Anxiety and Labor Pain of Primipara

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## Abstract

**Purpose:** The purpose of this study is to verify the effects of the Qigong training program on the anxiety and labor pains of primipara. **Method:** The research subjects were a total of 60 primipara who consulted a doctor regularly concerning their antenatal care. Among them, 30 people were the experimental group, and the other 30 people were the control group, and were selected as homogeneous with the experimental group. The degree of anxiety and labor pains were measured by State-Trait Anxiety Inventory(STAI) and Graphic Rating Scale(GRS). SPSS WIN 11.0 was used for data analysis. Obstetric and general characteristics between experimental and control groups, and a homogeneity test of state and trait anxiety were done by both  $X^2$  test and t-test. The hypothesis testing was analyzed by ANCOVA with a covariate of pretest value. **Result:** The first hypothesis, 'Primipara who join the Qigong training program have lower anxiety than those who do not join' was supported ( $F=28.8,$

$p<.000$ ). The second hypothesis, 'Primipara who join the Qigong training program have lower labor pain than those who do not join' was unsupported. **Conclusion:** It was verified that the Qigong training program was effective in alleviating anxiety; however it did not have any effect on relieving labor pain, so more in-depth research is needed later on.

Key words : Qigong training program, Anxiety, Labor pain, Primipara

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3. (Nonequivalent control group pretest-post-test design)

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(Spielberger, 1975). Spielberg, Gorsuch Lusbene(1970) (State-Trait Anxiety Inventory: STAI) Kim Shin(1978)

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3) 가 (Korean Society of Obstetrics and Gynecology, 1991).

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30 Cohen(1998)  
 $\alpha=0.05$  0.50 power  $1-\beta=0.75$

1 Park Hoe(1984) (Graphic Rating Scale)

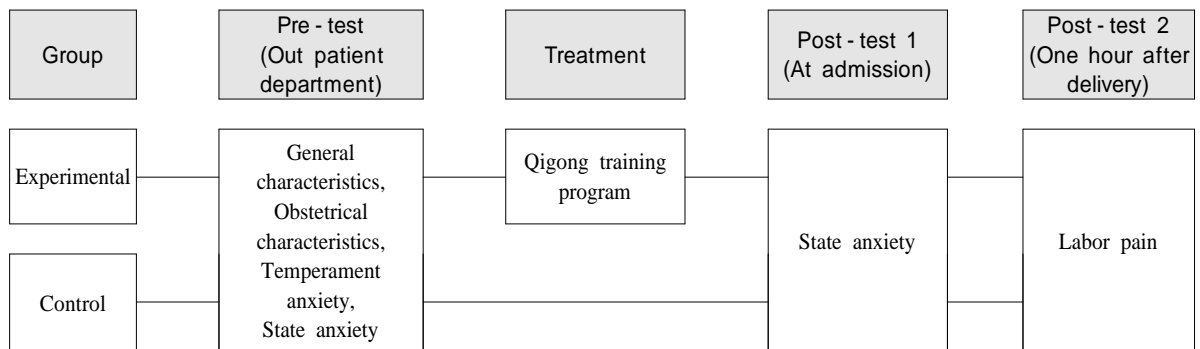
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<Figure 1> Process of research



<Table 1> Test of homogeneity about general characteristics

(N=60)

Variable		Experimental (n=30)	Control (n=30)	Total	<sup>2</sup> , t or Fisher	p
		f(%)	f(%)	f(%)		
Age(yr)	20-25	5(16.6)	5(16.8)	10(16.7)	0.09	0.953
	26-30	18(60.0)	17(56.6)	35(58.3)		
	31-35	7(23.4)	8(26.6)	15(25.0)		
	Mean(±SD)	28.2(3.02)	28.7(3.54)	28.5(3.28)		
Characteristics	Introvert	15(50.0)	15(50.0)	30(50.0)	0.00	1.000
	Extrovert	11(36.6)	11(36.6)	22(36.7)		
	The others	4(13.4)	4(13.4)	8(13.3)		
Level of education	~High school	8(26.6)	11(36.6)	19(31.7)	0.69	0.290
	College~	22(73.4)	19(63.4)	41(68.3)		
Religion	Buddhism	5(16.6)	11(36.6)	16(26.7)	3.48	0.322
	Christian	5(16.6)	5(16.6)	10(16.7)		
	Catholic	4(13.4)	2( 6.8)	6(10.0)		
	None	16(53.4)	12(40.0)	28(46.7)		
Month income (×₩10,000)	~199	17(57.6)	15(50.0)	32(54.2)	0.44	0.802
	200~299	8(27.4)	10(33.3)	18(30.5)		
	300~	4(13.6)	5(16.7)	9(15.3)		
Relationship with parent-in-law	Good	24(80.0)	26(86.6)	50(83.3)	0.48	0.488
	Moderate	6(20.0)	4(13.4)	10(16.7)		

<Table 2> Test of homogeneity about obstetrical characteristics

(N=60)

Variable		Experimental (n=30)	Control (n=30)	Total	<sup>2</sup> , t or Fisher	p
		f(%)	f(%)	f(%)		
Gestetional age(wks)	Mean(±SD)	33.5(1.5)	33.1(1.8)	33.8(1.7)	-1.51	0.134
Planned pregnancy	Yes	20(66.7)	21(70.0)	41(68.3)	0.07	0.781
	No	10(33.3)	9(30.0)	19(31.7)		
Number of abortion	No	22(73.4)	17(56.6)	39(65.0)	3.75	0.153
	1	3(10.0)	9(30.0)	12(20.0)		
	2	5(16.6)	4(13.4)	9(15.0)		
Antenatal check	Regular	27(93.1)	27(90.0)	54(91.5)	1.84	0.669
	Irregular	2( 6.9)	3(10.0)	5( 8.5)		
Degree of menstrual cramp	None	7(23.4)	6(20.0)	13(21.7)	0.37	0.830
	Common	20(66.6)	22(73.4)	42(70.0)		
	Severe	3(10.0)	2( 6.6)	5( 8.3)		

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<Table 2>.

33.8 , 68.3%가

가

가 31.7%

<Table 3>.

가 65.0% 가 , 1 20.0%, 2 15.0% .

33.5 , 38.2

91.5%가

가

8.5%

(t=1.22, p=0.23).

가 , '가 21.7%, '가 8.3%

35.6 ,

38.1

가

<Table 3> Test of homogeneity about temperament anxiety and state anxiety (N=60)

Variable	Experimental (n=30)	Control (n=30)	t	p
	M(±SD)	M(±SD)		
Temperament anxiety	33.5(6.8)	38.2(8.3)	1.22	0.23
State anxiety	35.6(7.8)	38.1(7.8)	-2.37	0.02

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 가 (F=39.9, p<.001).  
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<Table 4> Anxiety score (N=60)

Variable		Experimental	Control
		M(±SD)	M(±SD)
State anxiety	Pre	33.5(6.8)	38.2(8.3)
	Post	27.8(5.7)	38.9(7.3)

<Table 5> Difference of anxiety score (N=60)

Source	SS	df	MS	F	p
Main effect	2543.4	2	1271.7	39.86	.00
Covariable	684.2	1	684.2	21.44	.00
Error	1818.5	57	31.9		

Covariate: State anxiety before treatment

2) 2가

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 ANCOVA ,  
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<Table 6> Labor pain after treatment (N=60)

Variable	Experimental	Control
	M(±SD)	M(±SD)
Pain	7.4(1.2)	8.1(1.6)

<Table 7> Difference of labor pain on group after treatment (N=60)

Source	SS	df	MS	F	p
Main effect	8.9	2	4.5	2.22	.12
Covariable	0.1	1	0.1	0.05	.81
Error	114.3	57	2.0		

Covariate: State anxiety before treatment

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 (清靜功法) (Kim, 2003)  
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 Pyo (1997) 가  
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 (Hyun, 2001) (Symptom Checklist-  
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 (Lee,  
 2001)  
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 ( 40 , 40 ) Choi(1992)  
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 ( 40 , 20 ) (An, 1996)  
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