

# The Comparison of Endurance, Emotion Cognitive Regulation and Metacognitive Believes of Women with First Child Birth and Several Births

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**ABSTRACT:** The aim of the present research was comparison of endurance, emotion cognitive regulation and metacognitive believes in first childbirth women and several childbirths women in Rasht city. The research method is causal- comparative kind. Statistical universe of this research consist of all women with first childbirth and several childbirths had refered to Rasht hospitals between June and August in 2016. 120 persons were selected as samples by cluster random sampling method (60 women with first childbirth and 60 women with several childbirths). They were used Coonor & Davidson endurance questionnaire (2003), cognitive regulation of emotion questionnaire by Garnefski et al (2001) and Wells and Cartwright-Hattonmetacognition questionnaire (2004). It was used multivariate variance analysis to survey data and also SPSS 20. according to findings, there are differences among endurance, emotion cognitive regulation and metacognitive believes for women with first childbirth and several childbirths ( $p<0.001$ ). There is defense between endurance of women with first childbirth and women with several childbirths ( $p<0.001$ ). There is difference between emotion cognitive regulation of women with first childbirth and several childbirths ( $p<0.01$ ). There is difference between metacognitive believes of women with first childbirth and women with several childbirths ( $p<0.01$ ). According to results,there are differences among endurance, emotion cognitive regulation and metacognitive believes in these women that we can improve them by fit instructions.

**Keywords:** Endurance, Emotion Cognitive Regulation, Metacognitive Believes.

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## INTRODUCTION

Childbirth is a natural event and has long antecedence (Valizade & Bayrami, 2009). Various factors such as theraphical interventions, fatigue, drugs, womb tension and finally mother's anxiety are known as first childbirths experiences (Eggebo et al., 2007). Anxiety may be starter of ache destructive cycle, fear and muscular tightness and may increase Adrenalin and Epinefrin and also destruct womb muscular activity (Alellagen & Wjma, 2005). Endurance is known as human adjustment ability against events, overcoming and be reinforced by related experiences. This state is expanded by human internal ability and social skills and is shown as a positive trait (Diener et al., 2009). According to Werner and Smith (1992) endurance is human self-adjustment natural mechanism and believes that persons with more endurance are more flexible than the others. Shebi andGhafari (2015) executed one research about comparison of endurance among pregnant women and unpregnant in Khoy city.

Their research showed that there is significant difference in endurance level of pregnant and unpregnant women. According to Modares et al (2010), there are significant relationship among baby feed , problems related baby caring baby, weight, and mental factors such as life stressful events with childbirth traumatic stress disorder.

Emotion cognitive regulation is important for researcher because of little research about its role in childbirth experience. Persons adjust their emotions consciously or unconsciously by emotion cognitive adjustment (Bargh & Williams, 2007). Persons always use systematic strategies to adjust severity of their emotional experiences (Diamond & Aspinwall, 2003). Successful regulation of emotion is related with health consequences, interpersonal communications, fit occupational performance (Brackett & Salovey, 2004). The incidence of problems in emotion cognitive regulation is related with mental disorders (Aldao et al., 2010). Cognitive regulation of emotion refers to cognitive method of emotion stimulating information management (Oschner & Gross, 2005). On the other words, cognitive regulation strategies of emotion refer to the way of persons thought after a negative experience (Hasani et al., 2008).

According to Troy & Mauss (2011), person's ability in their emotions regulation may be important factor to determine their endurance. Cognitive regulation of emotion includes using cognitive- behavioral strategies to change an emotion experience severity. Metacognitive believes are known as the other effective factors upon childbirth (Wells, 2000). This model to explain mind controlling consists of two parts: cognitive activity and metacognition (it adjusts and assesses this cognitive activity). Metacognition consists of person believes about self, metacognitive experiences and metacognitive strategies (Wells, 2009). According to research records, negative metacognition believes about being uncontrollable and anxiety may predict depression and anxiety significantly (Yilmaz et al., 2011). The reason of many mental disorders of pregnant women is related with being unfamiliar with natural changes of pregnancy. Therefore, young persons need more instruction and attitude change toward pregnancy. No research has been done about this subject in our country. Therefore such research is necessary to improve pregnancy state. According to mentioned statements, researcher question is: Is there difference among endurance, cognitive regulation of emotion and metacognitive believes of women with first childbirth and several births?

## MATERIALS AND METHODS

Since research aim is the comparison of endurance, cognitive regulation of emotion and metacognitive believes of women with first childbirth and several births; research method is descriptive (causal- comparative). Statistical universe of this research consist of all women with first childbirth and several childbirths had refered to Rasht hospitals between June and August in 2016 (including 700 persons). Samples were selected on the basis of research variables (metacognitive believes: positive believes about anxiety, negative believes about thought controlling and dangers related to anxiety, cognitive nonconference and need to thought controlling, metacognitive process and cognitive self-awareness), cognitive regulation (positive & negative) and endurance (8 variables). 120 persons were selected as samples (for each variable=15). The samples were selected by cluster random sampling method (60 women with first childbirth and 60 women with several births). At the beginning, 5 hospitals, 10 women & pregnancy clinics were selected. Then 60 women with first childbirth and 60 persons with several births were selected by simple random method.

### *Instrument*

**A) Endurance questionnaire:** this questionnaire has been designed by Conner and Davidson(2003) and consists of 25 items. Conner and Davidson have reported Cronbach- $\alpha$  coefficient of endurance scale 0.89, reliability coefficient 0.87. This scale has validated by Mohammadi (2005) in Iran. He has reported %89 reliability coefficient (Besharat, 2007). Reliability of this questionnaire has been evaluated 0.72 by Cronbach- $\alpha$  method in this research.

**B) Cognitive regulation of emotion questionnaire:** Garnefski et al (2001) have designed this questionnaire. It has several dimensions and is one self-report tool including 36 items. Samani and Jokar (2007) have validated the Persian form of this scale. Garnefski et al (2002) have reported 0.71-0.81  $\alpha$ -coefficient. The validity of this questionnaire has been evaluated 0.73 for positive cognitive regulation and %69 for negative cognitive regulation.

**C) Metacognition believe questionnaire:** the short form of Wells metacognition questionnaire (MCQ-30) is one self-report (30 items) has designed by Wells and Mattheusin 1997 and studies persons believes about their thoughts. Wells & Cartwright-Hatton (2004) have reported 0.76-0.93 reliability for total scale and subscales and retest reliability 0.75 and also 0.59- 0.87 for subscales. Cronbach –  $\alpha$  coefficient of total scale has been stated 0.91 and 0.87 , 0.86, 0.81, 0.80 and 0.71 for subscales being uncontrollable, positive believes, cognitive awareness,

cognitive confidence and need to thought controlling orderly (Shirinzade, 2006). Cronbach –  $\alpha$  coefficient for total scale 0.69 and for subscales being uncontrollable, positive believes, cognitive awareness, cognitive confidence and need to thought controlling were reported 0.77, 0.72, 0.80, 0.82 and 0.79 orderly.

## RESULTS

### Main Hypothesis

There is difference among endurance, cognitive regulation of emotion and metacognitive believes of women with first childbirth and several childbirths.

**Table 1.** Descriptive indicators of endurance, cognitive regulation of emotion and metacognitive believes of women with first childbirth and several childbirths.

Variable	Group	Mean	SD
Positive Believes About Anxiety	Several Childbirths	51.81	17.08
	First Childbirth	46.01	14.63
Negative Believes About Being Uncomfortable	Several Childbirths	43.07	19.67
	First Childbirth	32.59	13.34
Believes About Cognitive Confidence	Several Childbirths	27.96	9.83
	First Childbirth	29.31	10.37
Believes About Need To Thought Controlling	Several Childbirths	30.48	7.84
	First Childbirth	29.22	7.32
Cognitive Self-Awareness	Several Childbirths	25.49	7.87
	First Childbirth	30.49	9.99
Situations Acceptance	Several Childbirths	14.85	4.18
	First Childbirth	12.52	3.52
Positive Further Concentration	Several Childbirths	15.23	3.29
	First Childbirth	13.06	3.65
Positive Concentration Upon Planning	Several Childbirths	14.31	3.19
	First Childbirth	11.57	3.65
Positive Further Evaluating	Several Childbirths	15.4	8.02
	First Childbirth	13.17	2.52
Accepting Attitude	Several Childbirths	13.09	2.68
	First Childbirth	10.66	2.93
Exaggerating	Several Childbirths	12.16	3.02
	First Childbirth	15.94	2.69
Others Blaming	Several Childbirths	11.65	3.12
	First Childbirth	13.17	3.21
Rumination	Several Childbirths	13.11	3.75
	First Childbirth	15.04	4.12
Self- Blaming	Several Childbirths	12.47	2.41
	First Childbirth	14.19	3.99
Endurance	Several Childbirths	45.84	9.06
	First Childbirth	41.71	5.77

The mean and standard deviation of endurance, cognitive regulation of emotion and metacognitive believes of women with first childbirth and several childbirths have been stated at above table. There are differences among means of variables. It was used multivariate- variance analysis test to survey significance of observed differences.

**Minor Hypothesis 1**

There is difference between endurance of women with first childbirth and several childbirths:

**Table 2.** Descriptive indicators of endurance for women with first childbirth and women with several childbirths

Variable	Group	Mean	SD
Endurance	Several Childbirths	45.84	9.06
	First Childbirth	41.71	5.77

The mean and standard deviation of endurance for women with first childbirth and women with several childbirths have been stated at above table. There is difference between endurance mean of women with first childbirth and women with several childbirths. It was used variance analysis test to evaluate significance of observed difference.

**Table 3.** Results of endurance comparison test for women with first childbirth and several childbirths women.

Changes Resources	SS	df	MS	Sig.
Endurance	902.98	1	902.98	15.7
Error	0.001	12076.27	210	57.51

According to results of table 1-2 , endurance difference of women with first childbirth and women with several childbirths (F= 15.7) is significant statistically (P < 0.001). It indicates that several childbirths show more endurance than the first childbirth women.

**Minor Hypothesis 2**

There is difference between cognitive regulation of emotion for first childbirth women and several childbirths women.

**Table 4.** Descriptive indicators of cognitive regulation of emotion for first childbirth women and several childbirths women.

Variable	Group	Mean	SD
Situations Acceptance	Several Childbirths	14.85	4.18
	First Childbirth	12.52	3.52
Positive Furthur Concentration	Several Childbirths	15.23	3.29
	First Childbirth	13.06	3.65
Positive Concentration Upon Planning	Several Childbirths	14.31	3.19
	First Childbirth	11.57	
Positive Furthur Evaluating	Several Childbirths	15.4	8.02
	First Childbirth	13.17	2.52
Acceptancing Attitude	Several Childbirths	13.09	2.68
	First Childbirth	10.66	2.93
Exaggerating	Several Childbirths	12.16	3.02
	First Childbirth	15.94	2.69
Others Blaming	Several Childbirths	11.65	3.12
	First Childbirth	13.17	3.21
Rumination	Several Childbirths	13.11	3.75
	First Childbirth	15.04	4.12
Self- Blaming	Several Childbirths	12.47	2.41
	First Childbirth	14.19	3.99

According to above table, there are difference between emotion cognitive regulation mean for several childbirths women and first childbirth women. It was used multivariate variance analysis test to survey significance of observed differences.

**Table 5.** Results of emotion cognitive regulation comparison test for first childbirth women and several childbirths women.

Change Resources	SS	df	MS	F	Sig.
Situation Acceptance	286.29	1	286.29	19.19	0.001
Error	3132.25	210	14.92		
Positive Furthur Concentration	250.12	1	250.12	20.14	0.001
Error	2532.18	210	12.06		
Positive Concentration Upon Planning	399.09	1	399.09	10.66	0.001
Error	7858.85	26	37.42		
Positive Furthur Evaluating	263.96	1	263.96	39.03	0.001
Error	1420.17	210	6.76		
Accepting Attitude	313.37	1	313.37	35.36	0.001
Error	1860.94	210	8.86		
Exaggerating	758.03	1	758.03	89.44	0.001
Error	1779.91210	8.48			
Others Blaming	122.54	1	122.54	11.42	0.001
Error	2252.93210	10.73			
Rumination	197.94	1	197.94	12.72	0.001
Error	3267.69	210	10.56		
Self- Blaming	158.54	1	158.54	14.49	0.001
Error	12076.01	210	57.51		

According to table (1-3) results, there are significant difference among accepting attitude (F= 19.19) , positive furtur concentration (F= 20.74), positive concentration upon planning (F= 10.66) , positive furthur evaluating (F= 39.03), accepting attitude (F=35.36), exaggerating (F=89.44), others blaming (F= 11.42), rumination (F= 12.72) and self- blaming (F= 14.49) statistically (P< 0.001). It means that several childbirths women show high accepting situations, positive furthur concentration, positive concentration upon planning, positive furthur evaluating and accepting attitude than first childbirth women.

**Minor Hypothesis 3**

There is difference between metacognitive believes of first childbirth women and several childbirths women.

**Table 6.** Deacription indicators of metacognitive believe for first childbirth women and several childbirths women.

Variable	Group	Mean	SD
Positive Believes About Anxiety	Several Childbirths	51.81	17.08
	First Childbirth	46.01	14.63
Negative Believes About Being Uncontrolable	Several Childbirths	43.07	19.67
	First Childbirth	32.59	13.34
Believes About Cognitive Confidence	Several Childbirths	27.96	9.83
	First Childbirth	29.31	10.37
Believes About Need To Thought Controlling	Several Childbirths	30.48	7.84
	First Childbirth	29.22	7.32
Cognitive Self-Awareness	Several Childbirths	25.49	7.87
	First Childbirth	30.49	9.99

According to above table, there is difference between mean of metacognitive believes for first childbirth women and several childbirths women. It was used multivariate variance analysis test to survey significance of observed differences.

**Table 7.** Results of metacognitive believes comparison test for first childbirth and several childbirths women.

Changes Resources	SS	df	MS	F	Sig.
Positive Believes About Anxiety	1782.87	1	1782.87	7.06	0.001
	53021.18	210	252.48		
Negative Believes About Being Thought Uncontrollable	5818.14	1	5818.142	0.67	0.001
	59102.44	210	281.44		
Believes About Cognitive Confidence	96.09	1	96.09	0.94	0.33
	21442.67	210	102.11		
Believes About Need To Thoughts Controlling	83.06	1	83.06	1.45	0.23
	12068.81	210	57.47		
Cognitive Self-Awareness	1329.98	1	1329.98	16.4	0.001
	17034.98	210	81.12		

According to table (1-4) results, there are significant differences among positive believes about anxiety of first childbirth women and several childbirths women ( $F=7.06$ ), negative believes about being uncontrollable and danger of first childbirth and several childbirths women anxiety ( $F= 20.67$ ), cognitive self- awareness of first childbirth women and several childbirths women( $F=16.4$ ). ( $p<0.01$ ). Therefore, several childbirths women show higher positive believes about anxiety and negative believes about being uncontrollable and anxiety danger than first childbirth women and first childbirth women have higher cognitive self-awareness than several childbirth women.

## CONCLUSION

The aim of the present research is comparison of endurance, emotion cognitive regulation and metacognitive of first childbirth women and several childbirths. According to results, endurance, emotion cognitive regulation and metacognitive believes are different in these women. Therefore, main hypothesis in accepted. Most research have been done in the field of pregnancy ache upon first childbirth and several childbirths women. Different psychological variables haven't been Alizade (2014), Ryding et al (2007), Christiaens and Bracke(2007). Pregnancy period is very important stage with physiological and psychological changes. Pregnancy period is the most stressful stage of any woman life. Even first childbirth stress is classified as severe stress at mental- social stress tables (told by Delavar Ghavam & Alizade Goradel, 2014). According to Delavar Ghavam and Alizade Goradel(2014) metacognitive believes variables are related to pregnancy fear and may predict pregnancy fear for first childbirth. Endurance of several childbirths women is more than the other women because they can solve their stress by positive strategies and also have more flexibility than first childbirth women. According to metacognitive model, metacognitions control mind and the way of person thought determine emotions. Nowadays, first childbirth women improve their information about pregnancy that may affect upon many psychological variables positively. Emotion management may increase person adjustment ability in stimulating situations. Person with improved emotion management may experience emotions or prevents them. In fact, being unable in emotions adjustment causes to overcome person feelings upon wisdom. Also this subject may improve their metacognitive believes than several childbirths women.

They also show higher score in cognitive self- awareness variable than several childbirths but several childbirths women have obtained higher score than first childbirth women in positive believes about anxiety, negative believes about being uncontrollable and being dangerous anxiety. Therefore, young women need more instruction and awareness toward pregnancy.

### Conflict of Interest

The authors declare no conflict of interest.

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