

# Investigation of Relationship between Inefficient Metacognitive Beliefs and Mental Well-Being in Female Students of Grade 1 in High Schools of Rasht City

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*Received: September 14, 2014*

*Accepted: December 20, 2014*

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## ABSTRACT

The main objective of the present research is to investigate relationship between inefficient metacognitive beliefs and mental well-being in female students of grade 1 in high schools of Rasht City. This is a correlation study. Statistical population of the research included all female students of grade 1 in high schools of Rasht City (educational District 2) whose fathers were war disabled or captive and studied in 2014. They were 300 people in number and 120 people of them were selected as sample members. Research instruments were: 1. Metacognitive knowledge about reading strategies questionnaire (by Mokhtari and Richard, 2002), 2. Keyes (1990) mental well-being questionnaire. In order to analyze data, correlation test and multiple regression coefficient analysis were used. Results of correlation analysis showed that there was no significant relationship between mental well-being and inefficient metacognitive beliefs ( $p > 0.01$ ). Considering the results of the research, it can be concluded that an increase in students' mental well-being can improve inefficient metacognitive beliefs.

**KEYWORDS:** inefficient metacognitive beliefs, mental well-being, female students

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## INTRODUCTION

One of the main factors in determination of learning behaviors is metacognitive understanding and awareness. Psychologists have used the term "metacognition" in order to explain knowledge and control of individuals over their learning activities and ways of thinking (Flavell, 1978; Flavell & Wellman, 1977, p 13). The term metacognition refers to our knowledge about our cognitive processes and way of using them for achieving pre-determined targets (Biehler & Snowman, 1993, p 34). Metacognition is a process by which learners learn about their learning, way of using information to achieve targets, judgment about cognitive processes in a special assignment and way of using strategies for achieving goals and can use it during and after performance (Flavell, Miller & Miller, 2001, p 65). Lefranco (1997) believes that the main emphasis of cognitive psychology is on learning how to learn (metacognition). Metacognitive awareness refers to an individual's knowledge about activities, strategies which can be used for doing the activities and individuals' awareness of their abilities in strategies (Taylor, 1983, p 270). In general, metacognition is a necessary mechanism for planning, supervising and evaluating thinking process in problem-solving (Efklides, 2001; Pentrich, 2002, p 32). Recent studies conducted on reading comprehension have paid more attention to cognitive and motivational processes while reading. Rodolico (2002) showed that teaching learning strategies can have positive influence on students' academic progress. Alexander & Jetton (2000), Persly (2000), Guthrie & Wigfield (1999), Per Ssley & Afflerbach (1995) (as quoted from Mokhtari and Richard, 2002, 90) found that awareness and control on comprehension and perception processes is one of the main aspects of skillful reading. Readers who are considered to be strategically efficient are those who regulate cognitive resources while reading. This is while naïve readers have low metacognitive awareness and ignore use of metacognitive strategies. One of the important concepts in life quality and positive psychology approach is well-being. Historically speaking, philosophers have widely dealt with happiness and well-being in ethical theories especially in Pleasure Principle of Epicure. Diener (1980) first introduced mental well-being term and its structures systematically in psychology and replaced happiness with mental well-being. He referred to activity theory in defining well-being and considered it as a function of personality and general approaches to environment and conditions. Mental well-being has two cognitive and emotional elements (Eaid, 2008). The cognitive dimension of well-being referred to individuals' cognitive evaluation of Life Satisfaction and emotional dimension refers to having maximum positive affect and minimum negative affect. In Meyer's mental well-being, the main emphasis is on top-down models (external-situational) or down-top theories (internal characteristics of processes). In down-top theories, it is believed that

satisfaction in special areas of life like work and marriage is followed by general life satisfaction. However, in top-down theory, it is believed that an individual can be satisfied with life in general although he or she is not satisfied with special aspects of life like work. In emotional dimension of well-being, Bradbourn (1976) specified three types of independence between two aspects (positive and negative affect): structural independence, causal independence and momentary independence. Structural independence means when an individual experiences different positive and negative feelings in a special period of time. Causal independence means positive and negative affect are influenced by different causes. Momentary independence refers to relationship between positive and negative emotion at a single moment. Results of Poloson&Jentery (1995) study also supported the presence of relationship between motivational beliefs (learning control beliefs, self-efficacy, and test anxiety) and cognitive/metacognitive learning strategies and academic advance. Ghasemi et al (2011) conducted a study titled: effectiveness of group-therapy on life quality, mental well-being and psychological health. They found that group therapy which is based upon life quality and is made up of a combination of positive psychology and cognition-behavior approach can promote psychological health and mental well-being of individuals. Peivasegar et al (2010) investigated relationship between creativity and mental well-being in students. They found that having a happy morale and being satisfied with life can affect new and original insights. Mousavinejad (1997) showed that deep learning strategies, self-efficacy and exam anxiety predict 34.7% of the variance of students' academic progress altogether. Considering the above research, we try to investigate whether there is a relationship between inefficient metacognitive beliefs and mental well-being of female students in grade 1 of Rasht City high schools?

**METHODOLOGY**

Considering the nature of the research, research methodology was of correlation type. The research is also a descriptive-analytical study. Statistical population of the research included all female students of grade 1 in high schools of Rasht City (2014 academic year). They were 300 people in number. Accessible sampling was conducted in three months. 120 students were selected as sample members whose fathers used to be war captives or had become handicapped in war.

**Instruments**

Metacognitive awareness questionnaire: metacognitive awareness of reading strategies questionnaire (Mokhtari and Richard, 2002) was used in order to evaluate metacognitive awareness and perception of reading strategies. The main goal of this instrument was measuring learners' awareness of different processes concerning reading and also determination of learners' goals with reading scientific contents. This questionnaire has three subscales: 1. Global Reading Strategies, 2. Problem-solving strategies, and 3. Support reading strategies, each containing 13, 8 and 9 questions, respectively. The questions are designed based on five-point Likert scale (from always to never). For each subscale, a mean score equal to 3.5 and above is considered as desirable and high, a mean score between 2.5 and 3.4 means an average state and a mean value below 2.4 is weak. Cronbach's alpha was equal to 0.89 and therefore the questionnaire had enough reliability.

Mental well-being questionnaire: the score obtained from Keyes mental well-being questionnaire (1990) was used as mental well-being score. The questionnaire has three sections and evaluates emotional, psychological and social dimensions of mental well-being. Emotional well-being subscale: this subscale has 12 questions and evaluates positive and negative emotions of the respondents within the last month leading to the study and is a score which is obtained in emotional well-being subscale. Psychological well-being subscale: this scale has 18 questions and contains 6 components: self-acceptance, personal development, and target at life, domination over environment, independence and positive relations with others. Respondents scored their cognitive evaluation on a 7-point Likert scale from 1 (very much disagree) to 7 (very much agree). Social well-being subscale: this scale has 15 questions and contains 5 components of social acceptance, realism, social participation, social continuity, and social integration and correlation. The respondents scored their evaluation on a 7-point Likert scale from 1 (very much disagree) to 7 (very much agree). Golestani calculated alpha coefficients to be equal to 0.86, 0.80, and 0.61 for emotional well-being, cognitive well-being and social well-being, respectively.

**Findings**

Table 1. Correlation matrix for evaluation of relationship between inefficient metacognitive beliefs and mental well-being

	1	2
1. Total inefficient metacognition score	1	
2. mental well-being	-0.054	1

Considering the results summarized in table 1, there is no significant relationship between inefficient metacognition and mental well-being ( $P > 0.01$ ,  $** = -0.054$ ).

## CONCLUSION AND DISCUSSION

The main target of this research was to investigate relationship between inefficient metacognitive beliefs and mental well-being in female students of high schools in Rasht City, Iran. Mental well-being is one of the signals of health measurement. Satisfaction with life is a kind of complete physical, psychological and social well-being. Individuals who have high levels of mental well-being have also high life quality and do not doubt about their abilities and are sensitive to emotional and exciting states. Endurance or the ability to adapt to psychological harms positively is a psychological subject of study and is investigated in relation to an individual's response to diseases, tense situations or problematic conditions at life. Some believe that it is a stable coping style (Lamond et al, 2009). Considering the results of the present research and previous studies, absence of relationship between inefficient metacognition and mental well-being guides us through the importance of metacognitive awareness in increasing mental well-being. In fact, we must deal with learning methods and increasing their skills in using learning and studying strategies especially metacognitive awareness in spite of concentration on learners' volume of learning. Students who have higher levels of mental well-being in establishment of relationship with others try to make information significant and establish logical relations with previous information and also control this process and provide an appropriate learning environment and thereby improve their academic performance. In general, it can be said that inefficient metacognition is a main challenge ahead of learning. Considering the fact that none of the learning styles is better than others, an individual can choose an optional learning style and try to strengthen it. In fact, individuals who have positive evaluations of their lives experience higher levels of comfort and can classify the information received widely and more appropriately. Individuals who have higher levels of mental well-being emphasize more on solving their life problems and resist more against their surroundings negative feedbacks. The relationship between the two variables was not significant in this research. This indicates that life situations which are in front of students are the same. Therefore, girls who have inefficient metacognitive beliefs usually form behavioral models in their minds which involve high flexibility. If they want to have appropriate mental well-being, they should put flexibility aside. On the other hand, mental well-being should be considered as a mediating variable and human health must be as a comprehensive image by integration of theory and research.

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