

Cognitive Appraisal Role in Relationship between Psychological Capital and Metacognitive Beliefs by Distress Tolerance

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Abstract--- *This paper aimed to model the role of negative cognitive appraisal in relationship between distress tolerance with psychological capital and negative metacognitive beliefs in couples suffering from infidelity. The present research method was a path analysis study with the correlation design of structural equations. 400 person were selected by Convenience sampling method from Tehranian married men and women suffering from infidelity that who referred to family counseling centers in the middle of 2019. Data collection was performed using questionnaire and were analyzed by AMOS and Spss22 software. The results showed that the designed model to explain the distress tolerance according to role of cognitive appraisal, had acceptable fitness indicators. Accordingly, the relationship between psychological capital and negative metacognitive beliefs variables by distress tolerance was confirmed through cognitive appraisal of stress. Thus, the variable of stress cognitive appraisal showed a moderating or decreasing role. That is, it facilitates the role of negative metacognitive beliefs in distress tolerance. Furthermore, the high negative cognitive appraisal of stress moderates the role of psychological capital on distress tolerance. According to the results, it can be said that various factors such as stress assessment play an important role in explaining the distress tolerance in couples suffering from infidelity.*

Keywords--- *cognitive appraisal of stress, metacognitive beliefs, distress tolerance, infidelity, psychological capital.*

I. INTRODUCTION

Infidelity is a kind of unfaithful emotional, sexual or emotional-sexual relationship with a person other than a spouse and its main feature is being a secret (Johnson, 2014). Characteristics of secrecy in infidelity and try to hide it will make distress in couples, which its tolerance is really difficult for any couple (Dashtbozorgi, 2018). Distress tolerance of infidelity can be influenced by factors such as negative metacognitive beliefs negative cognitive appraisal of stress and psychological capital in this group of couples (Harris, 2018). Before explaining these relationships, it is necessary to define and explain the distress tolerance, since how to deal with infidelity in couples depends on characteristics such as distress tolerance (Bendixen & Kennair, 2017).

Distress tolerance is defined as the capacity to experience and tolerate negative psychological states (Pearte, 2015). Distress tolerance is the ability to endure and accept negative emotions (El Salam & Kholy, 2017). In the cases such as marital infidelity, it should be noted that if couples are not able to alleviate their negative emotions, all their attention will be drawn to this issue or disturbing emotion and their performance will be significantly reduced (Doorley et al., 2019).

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Distress tolerance has been observed as an important structure in creating new insights against the onset and persistence of psychological trauma and also its prevention and treatment (Leyro et al., 2010). In line with the role of distress tolerance in married life, distress tolerance is defined as the individual's ability to experience and endure negative emotional states to achieve the ultimate goal and successfully adapt himself to marital life, despite all the challenges and problems (Shorey et al., 2017). In married life, distress tolerance can be considered as one of the important variables in a couple's ability to endure stressful situations that occur in life and can affect the couple's marital relationship (Munsch, 2015). In addition, in relation to the role of distress tolerance in married life it can be said that distress tolerance is one of the abilities and skills that can help couples to increase their adaptability and problem solving (Octaviana & Abraham, 2019). In fact, distress tolerance refers to the capacity for experience and resistance against distress (Doorley et al., 2019).

One of the variables associated with distress tolerance is psychological capital, because studies show that psychological capital is a protective factor against psychological distress (Zhou et al., 2017). Psychological capital is a positive psychological state and a realistic and flexible approach to life that is consisted of four structures of hope, positivism, resiliency and self-efficacy, and each one is considered as a positive psychological capacity (Luthans & Youssef, 2017).

Furthermore, negative metacognitive beliefs are related to the distress tolerance. The main idea of the of metacognitive beliefs theory (Wells, 2010) includes negative beliefs about cognition that constructs metacognition. Such beliefs lead to a pattern of thinking that is dominated by anxiety, rumination, threat stabilization, and uncontrollable thoughts (Antúnez, 2020). Metacognition is defined as any cognitive concern or process involved in interpreting, evaluating, monitoring, and controlling defined cognition that includes all negative cognitive beliefs and some specific metacognitive contexts associated with psychological distress (Eisenberg, 2011). In the metacognitive approach, it is assumed that beliefs in psychological disorders include metacognitive components that guide people's coping ways and thinking activities (Thompson, 2011). Positive and negative beliefs of people about their thoughts and their evaluation (for example, I have to worry about being ready, I can't control my thoughts) affect their thoughts. Furthermore, implicit metacognitive processes of individuals shape their plans and programs to guide cognition and action. According to the metacognitive approach, metacognitive components play the main role in creating and perpetuating individuals' maladaptive response styles (Wells, 2010).

With regard to the important role of intermediate variables in causal research and modeling, this study explored the role of cognitive appraisal of stress in explaining distress tolerance by psychological capital and negative metacognitive beliefs in couples with infidelity. By considering the role of cognitive appraisal of stress, the main question in the present study was that what the role of cognitive appraisal of stress in the relationship between psychological capital and metacognitive beliefs with distress tolerance of couples suffering from infidelity in Tehran was?

However, so far there have been reports of each of these variables in pairs, such as: conflicting cognitive appraisal, distress tolerance, and violence against women infidelity (Brem et al., 2019); the mediating effect of coping styles on The relationship between psychological capital and distress tolerance (Zu et al., 2017); the role of cognitive appraisal and commitments on the negative emotional responses of unauthorized sexual partners (Johnson et al., 2013), the main role of metacognitive components in creating and perpetuating maladaptive tolerance styles (Wells, 2010). The relationship between expectation of marriage and distress tolerance with marital adjustment (Taheri & Shirazi, 2019) has been published, but there is no research about the role of cognitive appraisal of stress in the relationship between psychological capital and negative metacognitive beliefs with distress tolerance in couples suffering from infidelity. Therefore, with regard to this research gap and also since identifying the role of cognitive appraisal of stress can have beneficial effects to help couples and families to reduce the harm of infidelity in people, thus it is necessary to study this role scientifically.

Because in order to explain the different effect of research variables on distress tolerance, we can refer to the opinion of Doorley et al. (2019) who stated, "Despite the great interest in research on distress tolerance, studies typically have ignored the role of distress tolerance in close interpersonal relationships and how it changes the role of distress tolerance every day, it can be said that understanding distress tolerance depends on the experience of distress and crisis. However, the existing studies have failed to include analytical models. Based on this lack of research, a proper explanatory model needs to be developed to address this gap. Therefore, the present study aimed to investigate the role of cognitive appraisal of stress in the relationship between psychological capital and negative metacognitive beliefs with distress tolerance in couples suffering from infidelity in Tehran.

II. METHOD

The present research method was descriptive-correlation of structural equations. The statistical population included all married men and women with infidelity who referred to family counseling centers in Tehran in the first half of 2019, which included about 873 people. According to the number of variables in the present study, 400 people were randomly selected from multistage clusters of family counseling centers located in the four areas of north, south, east and west of Tehran. For this reason, two counseling centers (Koosha and Iranmehr) from the north of Tehran, (Radin and Novin) counseling centers from the 8th district of East Tehran, (Taranom and Miad) from the 22nd district of west of Tehran and (Asoudeh counseling and Ershad) from the 18th district of south of Tehran were selected that among the married people with marital infidelity who referred to these centers, 25 couples (50 people) were selected randomly by cluster sampling method from each center. In other words, 100 married people from each urban area, by considering 50 people from each center who had the conditions to include the study were selected (they had permanent marriage during the research and one year had passed since their cohabitation and their age range was between 20 and 60 years old). Questionnaires were collected in person and outpatient; That is, the criteria for including married people in the sample group was to be in the age range of 20 and 60, to be in a permanent marriage, and to have lived together for at least one year that infidelity has occurred. However, the criterion for excluding the samples was such that if a person did not like to participate in the research or did not answer more than 10% of the questions, he was removed from the final sample and excluded. It should be noted that the samples completed the demographic information form and questionnaires after obtaining consent to participate in the study. Age range of 20 to 60 years was considered due to the fact that usually married people under the age of 20 are very few and also infidelity is not very important in them. On the other hand, according to the background, infidelity is reduced at the age of over 60, especially in the form of sexual infidelity. Accordingly, the age of the samples was selected in the range of 20 to 60 years. The implementation method was individual, which was performed in the field using a questionnaire. The collected data was analyzed in SPSS and AMOS software as structural equation method.

The research tools are as follows:

Distress Tolerance Scale (DTS)

It is a self-reported emotional distress tolerance index that has 15 items and four subscales: tolerance, absorption, assessment, and regulation. The minimum score of the subject in this scale is 15 and the maximum is 75, and the high score indicates more tolerance. The alpha coefficients for the scales (tolerance, adsorption, assessment, and regulation) are 0.72, 0.78, and 0.70 and 0.82, respectively, and are 0.82 for the overall scale (Simmons and Qaher, 2005). In Iran, Kordzanganeh (2015) calculated the reliability of its internal consistency (Cronbach's alpha) on 48 students of Ferdowsi University of Medical Sciences and Mashhad University of Medical Sciences (31 women and 17 men). His results showed a high internal consistency reliability for the whole ($\alpha = 0.71$) and a moderate reliability for the subscales: (0.54) for the

tolerance subscale, (0.42) for the absorption subscale, (0.56) for the assessment subscale and (0.58) for the regulation subscale (Kurdzangneh, 2015).

Psychological Capital Questionnaire (PCR)

The Psychological Capital Questionnaire was developed by Luthans (2007) and has 24 questions and includes four subscales of hope, resiliency, positivism and self-efficacy, in which each subscale contains 6 items and the subject of each item reacts on the 6-degree (totally disagree to totally agree) Likert scale. To calculate the total score of psychological capital, first the score of each subscale is calculated and from the sum of the scores of the subscales, the score of psychological capital is obtained. Higher scores on subscales and the total score indicate higher psychological capital. The validity of the questionnaire has been confirmed in various studies. Using factor analysis and structural equations, Luthans (2007) reported the chi-square ratio of the test as 24.6 and CFI and RMSEA statistics as 0.97 and 0.08, respectively, and the factor validity of the test was confirmed. The reliability of the questionnaire in Iran was reported by Bahadori Khosroshahi et al. (2012) as 0.85 based on Cronbach's alpha.

Metacognition Questionnaire-30 (MCQ-30)

This questionnaire is a 30-item self-report scale that measures people's negative metacognitive beliefs about their thinking. The answers on this scale are calculated on the basis of a four-point Likert scale (I do not agree = 1 to 4 = very much agree). The metacognitive questionnaire consists of five factors (subscales): cognitive trust, cognitive aristocracy, positive beliefs about anxiety, negative beliefs about uncontrollable thoughts and danger, and beliefs about the need to control thoughts. In the present study, three subscales of trust, uncontrollable and need to control were used. The metacognitive questionnaire has good convergent, construct and discriminant validity. The correlation of the overall scale was reported by the Penn State Worry Questionnaire and trait anxiety as 0.54 and 0.53, respectively, and the correlation of the subscales with the mentioned scales (worry and trait anxiety) in the range of 0.73 to 0.25. The reliability of the overall scale is reported to be 0.75 and the reliability of the subscales is reported to be in the range of 0.95 to 0.87, which shows the acceptable reliability and validity of the scale for measuring metacognitive beliefs in the main culture (Wells & Cartwright-Hatton, 2004). In Iran, Shirinzadeh et al. (2008) examined the validity and reliability of this scale on students. Exploratory factor analysis revealed five factors of cognitive trust, positive beliefs about anxiety, cognitive self-consciousness, negative beliefs about uncontrollable thoughts and risk, and beliefs about the need to control thoughts for this scale. The internal consistency of the whole scale was about 0.93 and for subscales of cognitive confidence (trust), positive beliefs, cognitive self-consciousness, negative beliefs, and the need to control thoughts were reported 0.93, 0.92, 0.92, 0.91, and 72, respectively.

Stress Assessment Measurement-Revised Scale (SAM-R) (Stress Cognitive Appraisal Scale)

In this study, a revised version of the Cognitive appraisal of stress Scale (Rowley et al., 2005) was used to measure stress cognitive appraisals. The questionnaire has 13 questions and three subscales: threat, challenge, and support. On this scale, participants respond to 13 items on a five-point range from never (zero) to most of the time (4). In the present study, two subscales of threat and challenge were used. In a study by Rowley et al. (2005) with the aim of analyzing the psychometric properties of the revised version of the psychological assessment scale, the results of factor analysis supported the three-factor structure scale, including threat, challenge, and support. In this study, the dimensions of the threat and the challenge and the dimension of resources representing the assessment indicated the coefficients of internal consistency for the three scales as 0.79, 0.81 and 0.79, respectively. In a study Shokri et al. (2016), internal consistency method was used to evaluate the reliability of the tool that the coefficients of internal consistency for the subscales of

threat, challenge, and support resources were reported to be 0.85, 0.82 and 0.79, respectively. Scale validity has been experimentally confirmed using the construct validity method by calculating its correlation with the self-efficacy questionnaire.

III. RESULTS

In the study of the role of stress cognitive appraisal in the relationship between psychological capital and distress tolerance in married couples with infidelity, it was found that the model fits between the variables using the analysis of structural equations. Thus the results of the model fitness indicators were at an acceptable level, which are summarized in Table 1.

The fit of the research model was examined by analyzing structural equations. Model fit indicators such as: 1) chi-square index (χ^2), 2) chi square-to-freedom ratio, 3) goodness of fit index (GFI) 4) adjusted goodness of index (CFI), 5) comparative fit index (CFI), and 6) root mean square error of approximation (RMSEA), in association with the observed data were assessed through structural equations. The results of the proposed model fitness indicators are described below.

Chi-square (χ^2)

It is a test to examine the acceptability of a model in society. Although when the sample size is 75 to 200, the chi-square value is a reasonable value for fitness, in samples with large size it is not a good indicator for fitness. In the present study, since the sample size was 400 people, the amount of chi-square was 263.04, which was significant and it should not be significant. However, this significance is expected due to the large sample size.

$$\frac{\chi^2}{df}$$

It is also called normal chi square, which according to Table 1, the value of the chi square in the present study is 2.39, which is large and indicates an acceptable fit for the relationship model between the variables (Figure 1).

Root Mean Square Error of Approximation (RMSEA)

According to Table 1, the value of this index in the initial proposed model was 0.059, which indicated the fit of the relationship model between the variables in (Figure 1).

Goodness of Fit Index (GFI)

According to the contents of Table 1, the value of this index in the present study is 0.93, which indicates the fit of the relationship model between the variables.

Table 1: Goodness of Fit Indicators or Fitness of the Research Model Factor Analysis

Indicators	χ^2	p	df	χ^2/df	NFI	IFI	GFI	AGFI	CFI	RMSEA
Model	263.06	0.001	110	2.39	0.94	0.96	0.93	0.9	0.96	0.059

Adjusted Goodness of Fit Index (AGFI)

The value of this index in (Figure 1) was 0.9, which is acceptable.

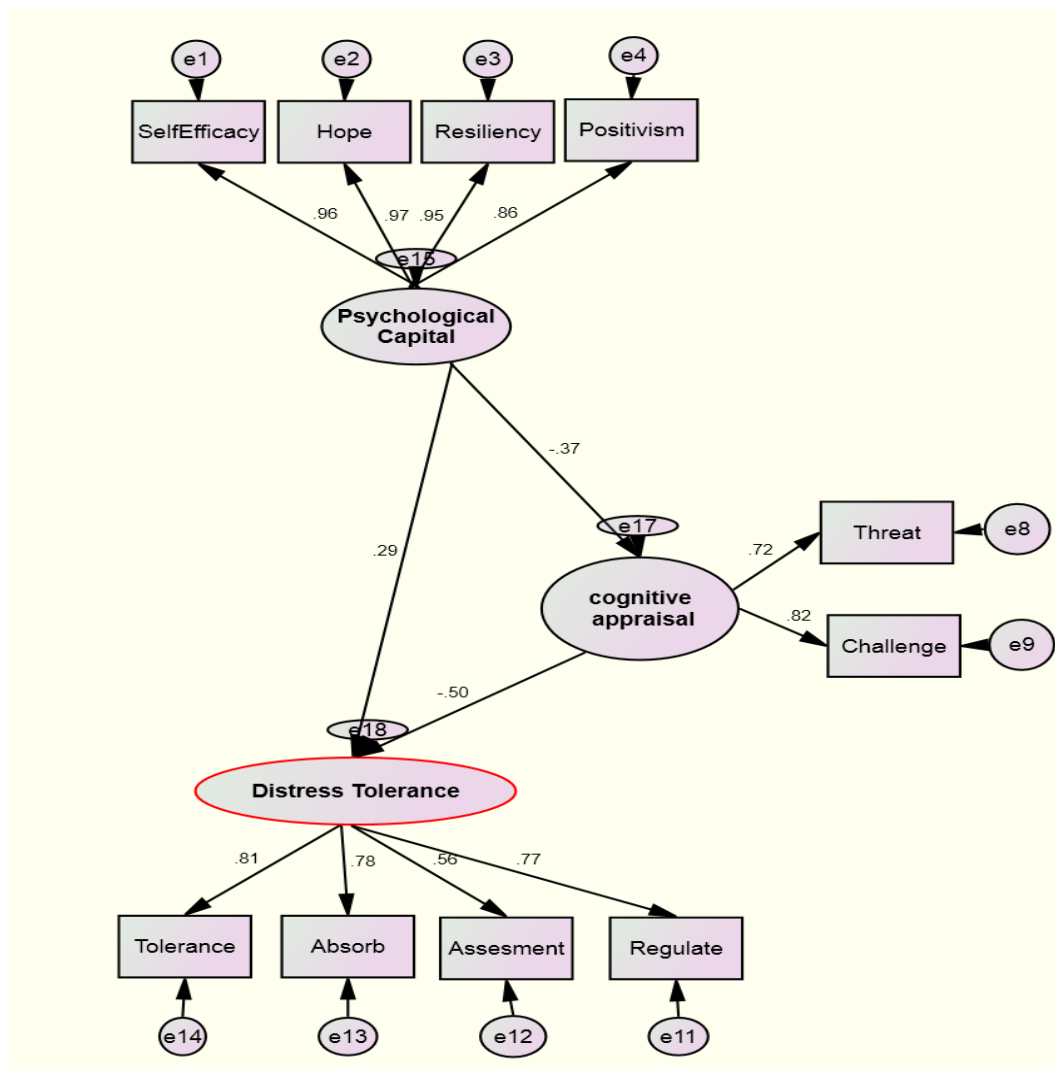


Figure 1: The Moderating Role of Cognitive Appraisals in the Relationship between Psychological Capital and Distress Tolerance

Increasing Fit Index (IFI) and Comparative of Fit Index (CFI)

The index values (IFI) were equal to 0.96 and the value of the index (CFI) was equal to 0.96, which indicates the good fit of the research model (Figure 1).

Bentler-Bonnet Index or Normed Fit Index (NFI)

The value of this index in the present study is 0.94, which indicates the fit of the relationship model between the variables (Figure 1).

According to Table 1, which summarizes the fit indicators of the final model in Figure 1, it can be concluded that most of the indicators are at the desired level and the final model has an acceptable fit.

Based on the above indicators, it can be concluded that the pattern of predicting distress tolerance through psychological capital with the role of cognitive appraisal in the research sample has an acceptable fit. Therefore, the results of Figure 1 can be trusted.

On the other hand, in examining the relationship between metacognitive beliefs through cognitive appraisals on distress tolerance, it was found that it was approved and the results of the fit indicators of the model in Table 2 are summarized and described below.

Table 2: Fit Indicators of the related Model Factor Analysis of the Role of Cognitive Appraisals in the Relationship between Metacognitive Beliefs and Distress Tolerance

Indicators	χ^2	<i>p</i>	<i>df</i>	χ^2/df	NFI	IFI	GFI	AGFI	CFI	RMSEA
Model	138.8	0.001	23	4.33	0.91	0.93	0.93	0.88	0.93	0.09

According to the results of Table 2, which summarizes the fit indicators of the model related to the fourth research question in Figure 2, it can be concluded that most of the indicators are at the desired level and the calculated model has an acceptable fitness.

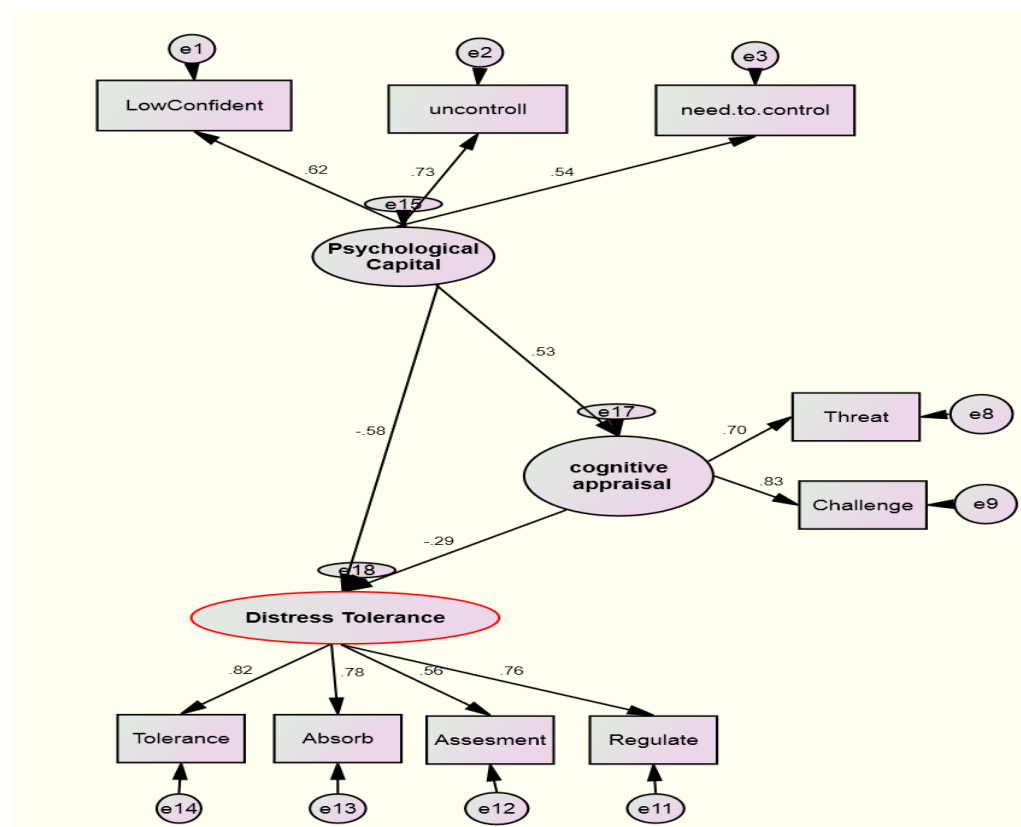


Figure 2: Pattern of Predicting Distress Tolerance through Morbid Metacognitive Beliefs with Cognitive Appraisal in Marital Infidelity

Chi-square

In the present study, the value of chi-square was equivalent to 138.8, which was significant.

Chi-square ratio

According to Table 2, the value of chi square in the present study is 4.33, which is relatively low and indicates the fit of the final model (Figure 2).

Root Mean Square Error of Approximation (RMSEA)

According to the table, the value of this index in the revised model was 0.9, which indicates the fit of the drawn pattern in Figure 2.

Goodness of Fit Index (GFI)

According to the contents (Table 2), the value of this index in the present study is 0.93, which also indicates the fit of the research model.

Adjusted Goodness of Fit Index (AGFI)

The value of this index in the revised model (Figure 2) was 0.88, which is acceptable due to its appropriateness compared to the quorum.

Incremental Fit Index (IFI) and Comparative Fit index (CFI)

The index value of (IFI) was 0.93 and the value of the index (CFI) was 0.93, which indicates the fit of the drawn model (Figure 2).

Bentler-Bonnet Index or Normed Fit Index (NFI)

The value of this index in the present study is 0.91, which indicates the fit of the corrective model (Figure 2). Based on the above indicators, it can be concluded that the research model has an acceptable goodness fit and we can trust the correlation values of the model in Figure 2 and interpret the regression values.

Based on the results in the above figures, after it was found that predictive variables were significantly correlated with distress tolerance through cognitive appraisal of stress, simultaneous analysis of the relationship between two variables of psychological capital and metacognitive beliefs with distress tolerance using cognitive appraisal of stress was performed and there result are shown in Table 3 and Figure 3.

Table 3: Factor Analysis Fit Indicators of the Model related to the Simultaneous Role of Psychological Capital and Metacognitive Beliefs

Indicators	χ^2	p	df	χ^2/df	NFI	IFI	GFI	AGFI	CFI	RMSEA
Model	228.6	0.001	110	3.17	0.94	0.96	0.92	0.88	0.96	0.07

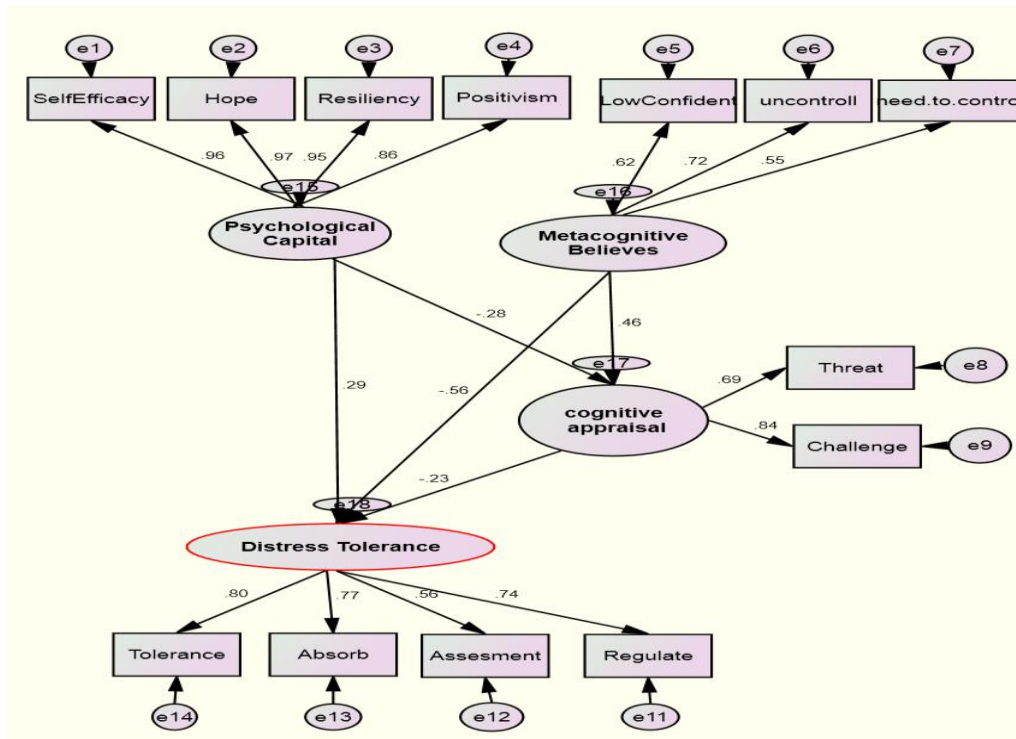


Figure 3: The Pattern of the Role of Cognitive Appraisal in Relation between Psychological Capital and Morbid

With regard to the results of Table 3 which indicates briefly the fit indicators of the research model in Figure 3, it can be concluded that the most indices were at a desirable level and the calculated model had an acceptable fitness.

According to Figure 3, the direct effect of psychological capital on distress tolerance was 0.29. This means that as the psychological capital increases, so does the couple's distress tolerance. However, the relationship between psychological capital and negative cognitive appraisal of stress was obtained -0.28. This means that with increasing psychological capital, the negative cognitive appraisal of stress is reduced. Since the direct relationship between negative cognitive appraisal of stress and distress tolerance was -0.23, it can be said that negative cognitive appraisal of stress has a moderating role in the effect of psychological capital on distress tolerance.

In the other direction of the model, it can be seen that the direct effect of negative metacognitive beliefs on the distress tolerance was -0.56. This means that by increasing negative metacognitive beliefs, couples' distress tolerance is reduced. Since the direct relationship between negative cognitive appraisal of stress and distress tolerance was -0.23, it can be concluded that negative cognitive appraisal of stress moderates the negative effect of negative metacognitive beliefs on tolerance of distress. Since the indirect relationship between negative metacognitive beliefs through cognitive appraisal is -0.22, so this decrease in the amount of indirect relationship can be due to the positive relationship between faulty metacognitive beliefs and cognitive appraisal (0.46). In general, according to the regression coefficients in Table 4, it can be said that the direct and indirect effect of faulty metacognitive beliefs on distress tolerance is significant. It can also be concluded that the direct and indirect effect of faulty metacognitive beliefs on distress tolerance is greater than the psychological capital on distress tolerance through cognitive appraisal.

Table 4: Regression Coefficients between Variables and Subscales of Latent Variables of Model 3

Dependent variable		Predictive variable	Estimate	S.E. ¹	C.R. ²	P
Cognitive appraisal of stress	-->	Metacognitive beliefs	0.520	0.076	6.580	***
Metacognitive appraisal of stress	-->	Psychological capital	-0.267	0.16	-5.012	***
Distress tolerance	-->	Metacognitive beliefs	-0.556	0.073	-6.470	***
Distress tolerance	-->	Psychological capital	0.301	0.013	6.165	***
Distress tolerance	-->	Cognitive appraisal of stress	-.213	.063	-2.991	.003
Self-efficacy	-->	Psychological capital	.958			
Hope	-->	Psychological capital	.975	.018	50.930	***
Resiliency	-->	Psychological capital	.947	.021	43.182	***
Positivism	-->	Psychological capital	.860	.021	29.575	***
Lack of confidence in recognition	-->	Metacognitive beliefs	.617			
Uncontrollability	-->	Metacognitive beliefs	.722	.115	9.435	***
Need to control thoughts	-->	Metacognitive beliefs	.547	.068	8.162	***
Treat of stress	-->	Cognitive appraisal of stress	.683	.051	11.295	***
Challenge of stress	-->	Cognitive appraisal of stress	.810	.081	12.137	***
Emotion regulation	-->	distress tolerance	.744			
Emotion assessment	-->	Distress tolerance	.561	.064	10.446	***
Emotion absorbing	-->	Distress tolerance	.773	.065	14.310	***
Emotion tolerance	-->	Distress tolerance	.796	.073	14.660	***

According to the values of the first row of Table 4, which shows that the correlation between faulty metacognitive beliefs with negative cognitive appraisal of stress ($r = 0.52$) was positive and was significant at the level of ($p = 0.001$). While the correlation between psychological capital and negative cognitive appraisal of stress ($r = -0.267$) was significant at the level ($p = -0.002$). In addition, the correlation between negative cognitive appraisal of stress and distress tolerance with coefficient ($r = -0.21$) was significant at the level of ($p = -0.03$). The relationship between faulty metacognitive beliefs and distress tolerance was also significant with the value ($r = -0.56$) at the level of ($p = -0.001$). The relationship between psychological capital and distress tolerance was also significant with the value ($r = 0.30$) at the level ($p = -0.01$). Based on this, the main research model was approved.

Summarizing the above findings, it can be said that the results on the direct and indirect effects of psychological capital and metacognitive beliefs on distress tolerance showed that the direct effect of psychological capital on distress tolerance ($\beta=0.29$, $p<0.01$) was positive and significant. However, the effect of negative metacognitive beliefs on distress tolerance ($\beta = -0.56$, $p < 0.001$) was negative and significant. Also, the indirect effect of negative metacognitive beliefs on distress tolerance through negative stress appraisal ($\beta = 0.23$, $p < 0.55$) was significant. While the indirect effect of

¹. Standard Error

². Critical Rate

psychological capital on distress tolerance through negative stress appraisal ($\beta = 0.05$; $p < 0.04$) was positive but not significant.

IV. DISCUSSION

Findings from the present study indicated the suitability of the research model on the role of negative cognitive appraisal in the relationship between psychological capital and negative metacognitive beliefs with distress tolerance. This finding was in line with the research question. The findings also relate to the role of psychological capital on distress tolerance in line with the results of previous studies (Zu et al., 2017). Because studies have shown that psychological capital acts as a protective factor against psychological distress (Zu et al., 2017). Regarding the explanation of the positive effect of psychological capital on improving distress tolerance, it can be said that since distress tolerance is defined as the capacity to experience and tolerate negative psychological states (Pirt, 2015), there is a positive relationship between the distress tolerance and the components of psychological capital such as resilience, self-efficacy, hope, and positivism.

In particular, how resilience affects distress tolerance can be argued that because resilience reflects flexibility and endurance in the face of adversity and difficulty in achieving success, it increases the tolerance of distress in couples who have broken their marriage vows. Also, distress tolerance, which means a high capacity to tolerate negative emotions, can be associated with self-efficacy beliefs, because self-efficacy can increase tolerance for couples by emphasizing commitment and striving for success in challenging tasks. In addition, hope has increased the couple's tolerance for distress by increasing resistance in pursuing goals or changing direction to achieve the goal of success. Optimism, which is based on optimistic documents about present and future success, has also increased the tolerance of distress in married couples by strengthening the positive attitude towards family and spouse. Because positivism refers to positive causal documents in which individuals explain positive and negative events and expect a positive outcome (Lutans et al., 2007). In general, by reviewing the relevant studies in this regard, it can be said that among the components of psychological capital, positivism and hope have the most protection against psychological stress. In summary, studies show that psychological capital is a protective factor against distress (Zu et al., 2017).

Table 5: Regression coefficient between Research Model Variables

Direction	β	Significance Level
Negative (Faulty) metacognitive beliefs $\rightarrow$ Negative cognitive appraisal	0.46	0.001
Negative metacognitive beliefs $\rightarrow$ Distress Tolerance	-0.56	0.001
Cognitive Appraisal $\rightarrow$ Distress Tolerance	-0.23	0.003
Negative metacognitive beliefs $\rightarrow$ Cognitive Appraisal $\rightarrow$ Distress Tolerance	-0.23	0.003
Psychological Capital $\rightarrow$ Negative cognitive appraisal	-0.28	0.001
Psychological Capital $\rightarrow$ Distress Tolerance	0.29	0.001
Cognitive Appraisal $\rightarrow$ Distress Tolerance	-0.23	0.003
Psychological Capital $\rightarrow$ Cognitive Appraisal $\rightarrow$ Distress Tolerance	-0.05	0.43

Also, according to the results of Table 5, the direct relationship between negative metacognitive beliefs and distress tolerance was significant. This finding is one of the new results in the present study, and in explaining it according to the Welsh metacognitive model (2000), it can be said that negative metacognitive beliefs are directly and significantly

correlated with pathological concern. Negative worries or positive beliefs about anxiety also increase stress and reduce distress tolerance.

Also, the results of correlation between cognitive stress appraisal and distress tolerance are consistent with the results of a study by Brem et al. (2019) in their study entitled Relationships Between Contradictory Cognitive Appraisal, Distress Tolerance, and Violence Against Female Marital Breach, they concluded that two dimensions of cognitive appraisal, such as lack of judgment about internal experiences and lack of response to internal experiences, had indirect effects on distress tolerance. Their findings show that women who allow their experiences to circulate in their minds without judgment or critical evaluation or avoidance are better able to tolerate temporary distress and are less likely to be abused in a friendship. Thus, mental appraisal as a mental aspect, and distress tolerance as aspects of empowerment, can be considered for women who have been harmed by their sexual partners.

In explaining the effect of negative metacognitive beliefs and cognitive stress appraisal, it can be argued that because cognitive beliefs assess and control cognition, it can affect cognitive stress appraisal. Thus, the role of metacognitive beliefs such as lack of confidence to memory, belief in risk uncontrollability, and the need for control over negative evaluations of stress can be understood and confirmed.

In summarizing the findings of the present study, it can be said that the direct relationship between negative metacognitive beliefs and positive cognitive appraisal is positive and significant. While the direct relationship between psychological capital and negative cognitive appraisal was the opposite. Also, the indirect relationship between negative metacognitive beliefs and distress tolerance through negative cognitive appraisal was opposite and significant. This means that by increasing negative metacognitive beliefs, and assessing stress as a threat and challenge, the rate of distress tolerance is reduced. While the indirect relationship between psychological capital and distress tolerance through negative cognitive appraisal was not significant.

In explaining the different effect of research variables through negative assessment of stress on distress tolerance, we can refer to the opinion of Doorley et al. (2019) who believed that despite the interest in research on distress tolerance, research on the role of tolerance in interpersonal relationships and how to change the tolerance of distress from day to day, have been neglected, Doorley et al. declared that understanding distress tolerance depends on the presence of distress, but existing studies have failed to include analytical models.

In line with these results, it can be said that the model of the relationship between psychological capital and metacognitive beliefs with distress tolerance of couples suffering from infidelity through cognitive appraisal is a two-way model with positive and negative relationships for the role of negative cognitive appraisal moderator.

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