The Relationship of Coping Responses and Metacognitive Beliefs with Addiction Potential in Male and Female Students, Behbahan University of Medical Sciences, Iran

Azam Aghdar
Behbahan Faculty of Medical Sciences, Behbahan, Iran.
azam.aghdar80@gmail.com

Abstract

This article aims to study the relationship of coping responses and metacognitive beliefs with addiction potential in male and female students studying in Behbahan University of Medical Sciences. Applying convenience sampling method, the sample size consisted of all students in Behbahan University of Medical Sciences. A correlational study was performed. Coping Response Inventory (CRI), Metacognitive Questionnaire (MCQ), and Addiction Potential Scale (APS) were administered to collect data. Pearson correlation coefficient and multivariate regression were employed to analyze the data. The results showed that coping responses are found to have a reverse and significant relationship with addiction potential. Metacognitive beliefs are found to have a reverse and significant relationship with addiction potential. Coping responses and metacognitive beliefs are found to have a reverse and significant relationship with addiction potential in students. No significant difference was found between male and female students in Behbahan University of Medical Sciences concerning coping responses, metacognitive beliefs, and addiction potential. According to above results, the effect of metacognitive beliefs is higher than coping responses. Significance level is $\alpha=0.05$ in this study.

Keywords: Coping Responses, Metacognitive Beliefs, Addiction Potential, Students.
1. Introduction

Every year, many students leave home for university. This causes multiple opportunities and students face unavoidable stressful challenges and factors. Growing expansion of the scope of psychology and its influence in various social, economic, and industrial fields brought a new color to communities concerning the relationship between people so that it is claimed that correct and logical solutions cannot be reached without considering the psychological aspect of issues. According to this, leaving home leads to shaken balance of individual sources and demand for new positions. Then individuals assess this balance (problem in adapting) and cope if they consider it a threat. Studies show that individuals equipped with a set of coping skills and capabilities are more successful in dealing with problems because using effective coping responses help them to overcome physical and psychological problems, social and interpersonal relationships, and contradiction. As a result, they enjoy quality of life and mental health (Garnefski and Kraaj, 2003).

Today, addiction is considered a general health problem worldwide. It is rare to find a country not involved with mood-altering substance abuse. In Iran, we are witnessing growing addiction among teenagers, young adults, and students due to the geographical location and almost 2000 kilometers borderline with Afghanistan and Pakistan, known as Golden Crescent, and annual production of more than 3500 tons of narcotics in these two countries as well as Iranian young population. Statistics show that almost 16% of addicts are younger than 19 years old in Iran and 28% are 20 to 24 years old (Barghi, 2002). Therefore, teenagers and young adults attempt self-destructive and harmful behaviors to their mental and physical health more than others due to biological and psychological changes and conditions which lead to irreparable damages and they are at risk of such issue. Multiple factors predispose a person to such self-destructive behaviors, most notably drug addiction. On the other hand, there are preventive factors to avoid getting caught in drug addiction. Multiple studies introduced the following factors as the most important encouraging ones: shyness, inability of rejecting others and peer pressure, feeling mature, reduced depression, increased emotional tendencies, underestimate the danger, and adventure (Tonetti, 2010). Some studies consider low tolerance level important in the initiation, continuation, and lack of drug abuse (Lindgren, 2010). Tendency to substance use is, in fact, common among the young and students. It is directly associated with their cognitive and attitudinal fields such as their understanding of legal and social acceptance of narcotics, losses resulting from drug abuse, and pleasant consequences or states of drug consumption (Sarvela and McClendon, 1988). Addiction is intensified in the form of massive unpleasant consequences. The world has experienced astonishing statistics of drug abuse in the last decade especially among teenagers and youth. Multiple factors are involved in drug addiction. Understanding the etiology of this phenomenon and its related factors are essential to design effective programs to prevent drug abuse. During the last decades, various theories have tried to offer clear reasons for tendency of individuals to narcotics. These theories have studied a wide range of genetic, psychological, social and family factors (Polimeni, Moore and Gruenert, 2010). Today, stress has become an important and undeniable part of human life. Research concerning stress focuses on the fact that what makes behavior health at risk is not stress, but the method of assessment of stress and coping strategies and stress management (Tötse, 1986). Lazarus and Folkman (1984) defined coping strategies as a set of behavioral and cognitive responses that aim to minimize pressure of stressful situation. They also defined coping strategies as a principle associated with the pressure of stressful situations. Coping strategies have been the center of attention as the main link
which interferes between mental pressure and psychiatric disorders. Hence, coping strategies are highly regarded for the prediction of drug abuse, frequency of consuming, completing the process of treatment, and relapse (Ball, 1998; Romer and Henson, 2007). Robinson and Walsh reported that teens that have been successful in continuing to abstain from drugs have better coping strategies and self-efficiency than others. As a result, they have fewer relapses in situations at risk and endured higher rate of drug avoidance. Lewinsohn, Gotlib, and Seeley (1995) stated lack of coping skills as an important and risky factor to begin drug abuse in teenagers. Research shows that drug addiction is a multi-factor or multi-dimensional phenomenon and various mental, social, cultural, and genetic factors are involved (Saduk and Saduk, 2009). Dragon (2015) showed that a significant relationship is found between positive metacognitive role and drinking alcohol. Considering emotional self-regulation, metacognitive beliefs affect drinking alcohol. In another study, they also concluded that a significant relationship is found between defense mechanisms and coping strategies in addiction relapse consultation (Sabri, 2013).

According to cognitive perspective, addictive behaviors are influenced by individuals’ attitudes (Wells and Matthews, 1996). Cognitive theories, however, emphasize the role of metacognition in etiology and continuation of psychological disorders (Wells and Matthews, 1996). From the metacognitive perspective, substance abuse creates significant rapid changes in cognitive events such as feelings, thoughts or memories (Spada and wells, 2005). Narcotics and psychoactive drugs might directly (or indirectly) influence cognitive events such as helping you relax, making avoidance, escaping from the painful cognition, and creating awareness and attention (a sense of attachment, shock and suppressed evaluation) by changing beliefs and attitudes about avoiding cognitive events. These cognitive changes might be the result of powerful reinforces obtained by drug consumption. Narcotics not only create positive beliefs and expectations about the effect of narcotics but also lead to obtain knowledge and awareness about cognitive consequences (Spada and Nikcevic, 2007). In Flowel’s point of view, it is metacognitive knowledge cognitive process which contributes in cognitive assessment, review, and control and regulates cognitive performance. Most theorists differentiate two aspects of metacognition. Metacognitive knowledge is the information that people have about learning factors and strategies related to assignments. Metacognitive regulation points out to different types of executive practices such as attention, review, planning, and identifying errors in performance and affect cognitive activities (Wells, 2004). Metacognition consists of variables impaired during drug abuse and might be effectively associated with cognitive analyses of addicts. According to Well’s idea (Spada and Wells, 2006), cognition, in information analysis process, is influenced by metacognitive and emotional factors. Therefore, emotional changes might alter assessment and cognition. Metacognitive perspective introduces any monitoring failure from the actual level of cognition to beyond this level as mental disorder factor (Spada and Wells, 2006). On the other hand, social stress and pressure, today, threaten mental health ever than before and direct individuals to mental disorders and self-destructive behaviors such as drug abuse. Human reaction, however, is not always to this level, but the psychological imbalance and damage to community relations are unpleasant consequences of such behavior. Since these behaviors committed by some people lead to generalization and expansion of such behaviors to other segments of society and failure to properly and reasonably deal with such acts and preventive measures lead to such intensified behaviors which cause irreparable damage to physical and mental health of individual and society, identifying the quality and quantity of such self-destructive behaviors is essential among the teenager and young adult age groups (Shirin Zadeh, 2006). Kashefi (2013) studied "the relationship between metacognitive beliefs and self-destructive behaviors in addicts". The data were analyzed by
Pearson correlation coefficient. A correlational and descriptive study was performed. Applying convenience sampling method, the sample size consisted of 132 addicts (120 males and 12 females) referring to detoxification centers in Torbat Heidariyeh, Iran in 2012. All addicts had diagnostic criteria for substance dependence disorder according to clinical psychologist and psychiatrist and 4th revised Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Metacognitive Questionnaire (MCQ-30) and Self-Harm Inventory (Agha Mohammadian, 2009) were administered to collect data. Pearson correlation coefficient was employed to analyze the data. Findings show that most self-destructive behaviors consist of permanent drug use, recreational drug use, and smoking. A significant and negative correlation was found between dimensions of metacognitive beliefs and self-destructive behaviors. Self-destructive behaviors are also found to have a negative relationship with scores in positive beliefs about worry, uncontrollability and danger, cognitive self-consciousness, and need to control thoughts and cognitive confidence (P<1%).

2. Methodology, sample size and sampling method

The sample size consisted of all students in Behbahan University of Medical Sciences. Convenience sampling method was applied.

3. Research tool

3.1 Coping Responses Inventory (CRI)
Billings and Moose used CRI to evaluate coping strategies. They devised a 32-item scale to obtain a simple and valid method to assess coping strategies. The questionnaire consists of 5 subscales: Problem Solution-focused, Cognitive Evaluation-based, Emotion-based, Somatic Inhibition-based and Social Support Seeking-based. Final score of this questionnaire is total sum of first two subscales as problem solving coping strategy and total sum of the last three subscales as emotional coping strategy. Reliability, obtained through retest, was reported 0.79. The validity is as follows: Problem Solution-focused (0.903-four questions), Cognitive Evaluation-based (0.688-six questions), Social Support Seeking-based (0.903-three questions), Somatic Inhibition-based (0.90-eight questions) (Husseini, Ghadamgahi, 1997).

3.2 Addiction Potential Scale (APS)
The inventory was devised by Wade et al. (1992) with three subscales: Addiction Potential Scale (APS), Addiction Acknowledgment Scale (AAS), and Alcoholism Scale. Wade et al. reported 0.69 and 0.79 reliability. Reliability was reported 0.53 by both Cronbach’s Alpha and Split Half methods (Minouee and Salehi, 2003).

3.3 Metacognitive Questionnaire (MCQ)
Wells, Ccertwright, and Hatton (2004) devised metacognitive questionnaire to measure individual differences in a selection of metacognitive beliefs, judgments and monitoring tendencies considered important in the metacognitive model of psychological disorders. MCQ-30 is the short form of MCQ devised by Wells, Ccertwright, and Hatton (2004). It has 30 self-report items which evaluates individuals' beliefs about their thoughts. The responses are calculated in a four-point Likert scale (1. Completely disagree to 4. Completely disagree). Similar to MCQ, this scale has five subscales. Each subscale covers 6 items. The subscales are Positive beliefs, Uncontrollability and Danger, Need to Control Thoughts, Cognitive Self-Consciousness, and Cognitive Confidence. Shirin Zadeh (2006)
translated this questionnaire for Iranian population. Cronbach’s Alpha Coefficient was reported 0.91 in Iranian sample. Cronbach’s Alpha Coefficients are as follows for subscales in Iranian scale: Uncontrollability and Danger (0.87), Cognitive Self-Consciousness (0.86), Cognitive Confidence (0.81), Cognitive Self-Consciousness (0.80), and Need to Control Thoughts (0.71). As Sharreh (2009) indicated some minor changes were made because translated form differed with the original one. Applying Cronbach’s Alpha, reliability was then reported 0.94. This questionnaire was employed to measure metacognitive beliefs.

4. Findings

Table 1: Frequency, mean, and standard deviation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addiction Potential</td>
<td></td>
<td>31.26</td>
<td>2.80</td>
<td>26</td>
<td>37</td>
</tr>
<tr>
<td>Coping Responses</td>
<td></td>
<td>84.05</td>
<td>8.09</td>
<td>69</td>
<td>103</td>
</tr>
<tr>
<td>Metacognitive Beliefs</td>
<td></td>
<td>81.42</td>
<td>9.79</td>
<td>60</td>
<td>106</td>
</tr>
</tbody>
</table>

As indicated in table 1, mean and standard deviation are 31.26 and 2.80, respectively. Minimum and maximum Additional Potential scores are 26 and 37, respectively. Concerning the Coping Responses, mean and standard deviation are 84.05 and 8.09, respectively. In terms of Metacognitive Beliefs, mean and standard deviation are 81.42 and 9.79, respectively. Minimum is 60 and maximum 106.

First Hypothesis: Coping Responses are found to have a significant relationship with Addiction Potential in students studying in Behbahan University of Medical Sciences.

Table 2: Correlation coefficient between Coping Responses and Addiction Potential

<table>
<thead>
<tr>
<th>Variable</th>
<th>Correlation Coefficient (r)</th>
<th>Significance level</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coping Responses- Addiction Potential</td>
<td>-0.449</td>
<td>0.000</td>
<td>300</td>
</tr>
</tbody>
</table>

As indicated in table 2, Coping Responses are found to have a reverse and significant relationship with Addiction Potential in students studying in Behbahan University of Medical Sciences (r=-0.449 and P<0.05). In other words, as Coping Responses rise, Addiction Potential declines in students studying in Behbahan University of Medical Sciences.

Second Hypothesis: Metacognitive Beliefs are found to have a significant relationship with Addiction Potential in students studying in Behbahan University of Medical Sciences.
Table 3: Correlation coefficient between Metacognitive Beliefs and Addiction Potential

<table>
<thead>
<tr>
<th>Variable</th>
<th>Correlation Coefficient (r)</th>
<th>Significance level</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metacognitive Beliefs - Addiction Potential</td>
<td>-0.605</td>
<td>0.000</td>
<td>300</td>
</tr>
</tbody>
</table>

As indicated in table 3, Metacognitive Beliefs are found to have a reverse and significant relationship with Addiction Potential in students studying in Behbahan University of Medical Sciences (r=-0.605 and P<0.05). In other words, as Metacognitive Beliefs rise, Addiction Potential declines in students studying in Behbahan University of Medical Sciences.

**Third Hypothesis**: Coping Responses and Metacognitive Beliefs are found to have a multiple significant relationship with Addiction Potential in students studying in Behbahan University of Medical Sciences.

Table 4: Multiple Correlation coefficients of Coping Responses and Metacognitive Beliefs with Addiction Potential in students in Behbahan University of Medical Sciences using Enter method

<table>
<thead>
<tr>
<th>A-Enter Statistical Indicators</th>
<th>F Ratio (Regression linearity )</th>
<th>Determination Coefficient RS (R^2)</th>
<th>Multiple Relation MR</th>
</tr>
</thead>
<tbody>
<tr>
<td>P probability (for regression linearity)</td>
<td>P=0.000</td>
<td>F=26.42**</td>
<td>R^2= 0.43</td>
</tr>
<tr>
<td>predictor variable</td>
<td>Beta</td>
<td>t</td>
<td>Sig (p)</td>
</tr>
<tr>
<td>Addiction Potential</td>
<td>Constant (Standard)</td>
<td>-6.23</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Coping Responses</td>
<td>-2.86</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td>Metacognitive Beliefs</td>
<td>-4.89</td>
<td>0.001</td>
</tr>
</tbody>
</table>

According to the results of regression analysis by Enter method, multivariate correlation coefficient was reported MR=0.658 and R^2= 0.43 for the linear relationship of Coping Responses and Metacognitive Beliefs with Addiction Potential in students studying in Behbahan University of Medical Sciences which is significant at 5% confidence level. Therefore, the third hypothesis is approved. According to determination coefficient (RS(R^2)), it is clear that 43% of Addiction Potential variance is determined by predictor variables (coping responses and metacognitive beliefs) in students studying in Behbahan University of Medical Sciences. The significance level is less than 5%, showing the significant effect of these variables on Addiction Potential. According to the results, the effect of metacognitive beliefs is higher than coping responses.

**Questions**: Is there a significant difference between male and female students concerning Addiction Potential, Coping Responses, and Metacognitive Beliefs. T-test was employed. Table 5 lists the results of T-test to compare male and female students concerning Addiction Potential, Coping Responses, and Metacognitive Beliefs.
Table 5: Results of T-test for two independent samples to compare male and female students concerning research variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Gender</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>T-test</th>
<th>Freedom Degree</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addiction Potential</td>
<td>Male</td>
<td>31.33</td>
<td>2.85</td>
<td>0.542</td>
<td>298</td>
<td>0.588</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>31.16</td>
<td>2.74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coping Responses</td>
<td>Male</td>
<td>84.07</td>
<td>8.01</td>
<td>0.043</td>
<td>298</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>84.03</td>
<td>8.23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metacognitive Beliefs</td>
<td>Male</td>
<td>80.68</td>
<td>9.11</td>
<td>1.47</td>
<td>298</td>
<td>0.141</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>82.36</td>
<td>10.56</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As indicated in table 5, equal assumption of male and female scores is approved at 5% confidence level. It means that no significant difference is found between male and female students in students studying in Behbahan University of Medical Sciences concerning Addiction Potential, Coping Responses, and Metacognitive Beliefs. Although Addiction Potential is higher among male, Metacognitive Beliefs is higher among female.

5. Discussion and Conclusion

This article aims to study the relationship of coping responses and metacognitive beliefs with addiction potential in male and female students studying in Behbahan University of Medical Sciences. As indicated in table 2, Coping Responses are found to have a reverse and significant relationship with Addiction Potential in students studying in Behbahan University of Medical Sciences ($r=-0.449$ and $P<0.05$). In other words, as Coping Responses rise, Addiction Potential declines in students studying in Behbahan University of Medical Sciences. This result is consistent with studies conducted by Zarin Kalak et al. (2010), Ranjbar Noushari et al. (2012), and Rezakhan Moghadam et al. (2012). Multiple factors predispose a person to such self-destructive behaviors, most notably drug addiction. On the other hand, there are predictive factor to avoid getting caught in drug addiction. Multiple factors predispose a person to such self-destructive behaviors, most notably drug addiction. Multiple studies introduced the following factors as the most important encouraging ones: shyness, inability of rejecting others and peer pressure, feeling mature, reduced depression, increased emotional tendencies, underestimate the danger, and adventure. Some studies consider low tolerance level important in the initiation, continuation, and lack of drug abuse. Tendency to substance use is, in fact, common among the young and students. It is directly associated with their cognitive and attitudinal field such as their understanding of legal and social acceptance of narcotics, losses resulting from drug abuse, and pleasant consequences or states of drug consumption. Today, stress has become an important and undeniable part of human life. Research concerning stress focus on the fact that what makes behavior health at risk is not stress, but the method of assessment of stress and coping strategies and stress management. Lazarus and Folkman (1984) defined coping strategies as a set of behavioral and cognitive responses that aim to minimize pressure of stressful situation. They also defined coping strategies as a principle associated with the pressure of stressful situations. Coping strategies have been the center of attention as the main link which interferes...
between mental pressure and psychiatric disorders. Hence, coping strategies are highly regarded for the prediction of drug abuse, frequency of consuming, completing the process of treatment, and relapse. Robinson and Walsh reported that teens who have been successful in continuing to abstain from drugs have better coping strategies and self-efficiency than others. As a result, they have fewer relapses in situations at risk and endured higher rate of drug avoidance.

As indicated in table 3, Metacognitive Beliefs are found to have a reverse and significant relationship with Addiction Potential in students studying in Behbahan University of Medical Sciences (r=-0.605 and P<0.05). In other words, as Metacognitive Beliefs rise, Addiction Potential declines in students studying in Behbahan University of Medical Sciences. This result is consistent with studies conducted by Kashefi (2013), Noushari et al. (2012), and Rezakhani Moghadam et al. (2012). Multiple factors predispose a person to such self-destructive behaviors, most notably drug addiction. On the other hand, there are predictive factor to avoid getting caught in drug addiction. Multiple factors predispose a person to such self-destructive behaviors, most notably drug addiction. Multiple studies introduced the following factors as the most important encouraging ones: shyness, inability of rejecting others and peer pressure, feeling mature, reduced depression, increased emotional tendencies, underestimate the danger, and adventure. Some studies consider low tolerance level important in the initiation, continuation, and lack of drug abuse. Tendency to substance use is, in fact, common among the young and students. It is directly associated with their cognitive and attitudinal field such as their understanding of legal and social acceptance of narcotics, losses resulting from drug abuse, and pleasant consequences or states of drug consumption. Some studies consider low tolerance level important in the initiation, continuation, and lack of drug abuse. Tendency to substance use is, in fact, common among the young and students. Metacognitive knowledge or cognitive process contributes in cognitive assessment, review, and control and regulates cognitive performance. Most theorists differentiate two aspects of metacognition. Metacognitive knowledge is the information that people have about learning factors and strategies related to assignments. Metacognitive regulation points out to different types of executive practices such as attention, review, planning, and identifying errors in performance and affect cognitive activities. Metacognition consists of variables impaired during drug abuse and might be effectively associated with cognitive analyses of addicts. According to Well’s idea (Spada and Wells, 2006), cognition, in information analysis process, is influenced by metacognitive and emotional factors. Therefore, emotional changes might change assessment and cognition. Metacognitive perspective introduces any monitoring failure from the actual level of cognition to beyond this level as mental disorder factor. On the other hand, social stress and pressure, today, threaten mental health ever than before and direct individuals to mental disorders and self-destructive behaviors such as drug abuse. Human reaction, however, is not always to this level, but the psychological imbalance and damage to community relations are unpleasant consequence of such behavior. Since these behaviors committed by some people lead to generalization and expansion of such behaviors to other segments of society and failure to properly and reasonably deal with such acts and preventive measures lead to such intensified behaviors which cause irreparable damage to physical and mental health of individual and society, identifying the quality and quantity of such self-destructive behaviors is essential among the teenager and young adult age groups.

According to the results of regression analysis by Enter method, multivariate correlation coefficient was reported MR=0.658 and R²= 0.43 for the linear relationship of Coping Responses and Metacognitive Beliefs with Addiction Potential in students studying in Behbahan University of
Medical Sciences which is significant at 5% confidence level. Therefore, the third hypothesis is approved. According to determination coefficient (RS(R²)), it is clear that 43% of Addiction Potential variance is determined by predictor variables (coping responses and metacognitive beliefs) in students studying in Behbahan University of Medical Sciences. The significance level is less than 5%, showing the significant effect of these variables on Addiction Potential. According to the results, the effect of metacognitive beliefs is higher than coping responses. This finding is consistent with studies conducted by Zarin Kalak et al. (2010), Kashefi (2013), Noushari et al. (2012), and Rezakhani Moghadam et al. (2012). Some studies consider low tolerance level important in the initiation, continuation, and lack of drug abuse. Tendency to substance use is, in fact, common among the young and students. It is directly associated with their cognitive and attitudinal field such as their understanding of legal and social acceptance of narcotics, losses resulting from drug abuse, and pleasant consequences or states of drug consumption. Robinson and Walsh reported that teens who have been successful in continuing to abstain from drugs have better coping strategies and self-efficiency than others. As a result, they have fewer relapses in situations at risk and endured higher rate of drug avoidance. Lewinsohn, Gotlib, and Seeley (1995), who studied American teenagers, stated lack of coping skills as an important and risky factor to begin drug abuse in teenagers. According to cognitive perspective, addictive behaviors are influenced by individuals’ attitudes. Modern cognitive theories, however, emphasize the role of metacognition in etiology and continuation of psychological disorders. In metacognitive perspective, substance abuse creates significant rapid changes in cognitive events such as feelings, thoughts or memories.
6. References

Abd Halim, M. H., Farhan Sabri; ((Relationship between defense mechanisms and coping styles among relapsing addicts.)) Social and Behavioral Sciences 84 (2013) 1829-1837.


Dragan, Malgorzata; ((Difficulties in emotion regulation and problem drinking in young women: The mediating effect of metacognitions about alcohol use)). Addictive Behaviors; September 2015, Vol. 48: 30-35.


