

Reflections on Mood: Dimensions of the Meta-Mood Experience

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Abstract

To explore the dimensions of meta-mood experience, we asked 217 undergraduates to complete the Trait Meta-Mood Scale. Factor analysis revealed four dimensions: Attention, Clarity, Repair, and a new factor: Receptiveness. Future research could examine whether Receptiveness influences subjective well-being and stress reactivity in the same ways as Attention and Clarity.

Introduction

Our emotions and moods affect our daily lives and the ways in which we engage with the world. Moods have two parts: the direct experience of the mood in which we may identify our moods as happy or sad (Russell, 1978) and the inner reflective thoughts, associations, and reactions we have about the mood experience (Mayer & Gaschke, 1988). How we perceive our moods and the degree to which we pay attention to, identify, and repair our emotions is part of the meta-mood experience (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995). The meta-mood experience varies by individual and can impact their ability to cope with stress and navigate interpersonal relationships (Gohm, 2003; Hodzic, Ripoll, Costa, & Zenasni, 2016; Mayer & Gaschke, 1988). The emotional processing abilities associated with the meta-mood experience even play a role in our well-being and life satisfaction (Wong et al., 2007).

Designed by Salovey and Mayer, the Trait Meta-Mood Scale (TMMS) is a 30-item measure designed to gauge the meta-mood experience along three factors: Attention, Clarity, and Repair (Salovey et al., 1995; Salovey, Stroud, Woolery, & Epel, 2002). Attention is the ability to notice and pay attention to emotions. Clarity is the ability to recognize moods and differentiate them from other moods. Repair is the ability to control and alter one's own moods (Salovey et al., 2002). In addition to measuring the meta-mood experience, the TMMS is a way to assess emotional intelligence. Emotional intelligence is the ability to recognize, understand, process, and regulate emotions efficiently in oneself and others (Pekaar, Bakker, Born, & van der Linden, 2018). Emotional intelligence has been linked to wellness, the ability to cope with stress, and decreased rumination (Salovey et al., 2002).

Previous research on the meta-mood experience frequently uses the TMMS to explore the relationship between the meta-mood experience and other constructs. An understanding of the dimensions of the meta-mood experience is important because some of the dimensions, such as emotional repair, have been linked to increased life satisfaction and reduced anxiety (Wong et al., 2007). One study found that self-efficacy, or the belief in one's own ability to achieve goals and succeed, had a mediating effect on emotional clarity and emotional repair when it came to the impact of the meta-mood experience on subjective well-being (Vergara, Alonso-Alberca, San-Juan, Aldas, & Vozmediano, 2015). Other studies have shown that meta-mood dimensions have predictive value for life satisfaction and subjective well-being over time (Extremera, Salguero, & Fernández-Berrocal, 2011) and across cultures (Wong et al., 2007; Lischetzke, Eid, & Diener, 2012).

With a wide variety of research showing the pervasiveness of meta-mood abilities on various facets of human life, such as life satisfaction (Wong et al., 2007; Extremera et al., 2011), and subjective well-being (Vergara et al., 2015), it may be beneficial to reexamine the dimensions of the meta-mood experience in light of these new studies. The purpose of the current study is to identify the dimensions of the meta-mood experience.

Method

Participants

Of the 217 undergraduate student participants who completed the study, 68 (31.34%) were male and 149 (68.66%) were female. Results of the demographic survey also showed that 127 participants identified as White (58.53%), 33 as Asian (15.06%), 22 as African American (10.05%), 20 as Hispanic (9.13%), one as Native American (0.46%), and 14 individuals identified as "Other" (6.39%). Participants' age ranged from 18 to 49 years old with a mean age of 22.62 (SD = 6.23). One person did not disclose their age.

Measures

Demographics. Demographic information collected from participants included sex, age, and ethnicity.

Trait Meta-Mood Scale. The TMMS has 30 items measuring three subscales: Attention (which consists of 13 items such as "I don't pay much attention to my feelings"), Clarity (which consists of 11 items such as "I usually know my feelings about a matter") and Repair (which consists of six items such as "If I find myself getting mad, I try to calm myself down"). These items are rated using a five-point scale where 1 = Strongly Disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, and 5 = Strongly Agree. (Salovey et al., 1995).

Procedures

We placed an ad at the University of Nevada, Las Vegas recruiting psychology undergraduate students to participate in the study for course credit. The minimum age for participation was 18 years old. The TMMS was administered among other measures as part of a larger study. Over a series of two separate testing sessions lasting approximately 1.5 hours each, participants completed written tests and measures individually on a computer. For both sessions, each part was completed on a separate web page. Demographics and responses to the TMMS were recorded during the first session.

Data Analysis

In order to assess the number of dimensions of the TMMS, we performed a principal components analysis with multiple factors. First, we considered four criteria to determine the number of factors: the Kaiser-Guttman rule (Cliff, 1988; Velicer, Eaton, & Fava, 2000), the scree plot (Cattell, 1966), parallel analysis (Horn, 1965; Cota, Longman, Holden, & Rekken, 1993), and Velicer's minimum average partial (MAP) test (Velicer, 1976). The Kaiser-Guttman rule indicated six factors, but we discounted these results as previous research has shown that the Kaiser-Guttman rule overestimates the number of factors (Valicer, Eaton, & Fava, 2000). Both the scree test and parallel analysis indicated five factors, while the MAP test indicated three factors. All three of these tests are considered accurate within one factor and so we gave more consideration to these tests (Zwick & Velicer, 1986; Velicer et al., 2000). Based on these criteria, we extracted four factors in order to be conservative and not overestimate the number of factors.

We examined several rotations: varimax, quartimax, equamax, direct oblimin, and promax. The direct oblimin rotation had the lowest number of complex variables (3) and showed a high number of hyperplanar coefficients (50). The direct oblimin rotation reflected a maximum correlation among the factors of 0.37 and an average correlation of 0.18. Based on these criteria, we chose the direct oblimin rotation.

Results

Factor 1 loaded highest on the items “I almost always know exactly how I’m feeling” and “I am rarely confused about how I feel”. This factor loaded negatively on items that related to feeling unsure or unclear about emotions. Factor 1 seemed to capture how well a person understood their feelings. For these reasons, we named the first factor Clarity.

We reverse scored factor 2. Negative salient loadings included “I don’t usually care much about what I’m feeling” and “It is usually a waste of time to think about your emotions,” suggesting an emphasis on the attention given to emotions. These items signaled the willingness to think emotionally so we named the second factor Attention.

Items that loaded the highest on Factor 3 involved thinking positive thoughts despite negative emotions (“I try to think good thoughts no matter how badly I feel”). Other items that loaded on Factor 3 related to an optimistic outlook (“Although I am sometimes sad, I have a mostly optimistic outlook”). Factor 3 captured how well a person was able to adjust their mood when faced with negative emotions. We named the third factor Repair.

Factor 4 captured an openness to feel emotion and use mood to guide one’s actions. “I believe in acting from the heart” is an item loaded on this factor which captures this willingness well. The highest loading item in Factor 4 was “The best way for me to handle my feelings is to experience them to the fullest”, which suggests a receptivity to emotional experience. We named the fourth factor Receptiveness.

Ultimately, we extracted four factors, which we named Clarity, Attention, Repair, and Receptiveness. See Table 1 for a summary of the items, factor loadings, and intercorrelations.

Table 1
Factor Analysis Results for Rotated Factors

Item	Factor				h^2
	1	2	3	4	
30. I almost always know exactly how I am feeling.	0.79	-0.10	0.07	0.06	0.63
6. I am rarely confused about how I feel.	0.76	-0.16	-0.04	0.05	0.51
25. I am usually very clear about my feelings.	0.76	-0.09	0.03	0.04	0.55
16. I am usually confused about how I feel.	-0.76	-0.19	0.03	0.14	0.70
28. I usually know my feelings about a matter.	0.69	0.03	0.00	0.07	0.48
11. I can never tell how I feel.	-0.63	-0.24	0.01	0.00	0.53
20. I feel at ease about my emotions.	0.62	0.02	0.10	0.12	0.45
15. I am often aware of my feelings on a matter.	0.59	0.06	0.02	0.08	0.38
5. Sometimes I can’t tell what my feelings are.	-0.56	0.02	-0.10	0.20	0.41
22. I can’t make sense out of my feelings.	-0.55	-0.09	-0.03	0.15	0.39
4. I don’t usually care much about what I’m feeling.	-0.03	-0.73	0.05	0.09	0.53
29. It is usually a waste of time to think about your emotions.	-0.08	-0.69	-0.05	0.01	0.54
3. I don’t think it’s worth paying attention to your emotions or moods.	-0.06	-0.64	0.04	0.20	0.46
17. One should never be guided by emotions.	-0.03	-0.58	0.04	-0.19	0.38
27. Feelings are a weakness humans have.	0.01	-0.57	-0.11	0.18	0.39
23. I don’t pay much attention to my feelings.	0.00	-0.54	-0.28	-0.08	0.48
18. I never give in to my emotions.	0.08	-0.54	0.15	-0.28	0.35
2. People would be better off if they felt less and thought more.	-0.03	-0.46	0.11	-0.04	0.20
21. I pay a lot of attention to how I feel.	0.01	0.44	0.27	0.37	0.50
24. I often think about my feelings.	-0.28	0.35	0.23	0.29	0.30
1. I try to think good thoughts no matter how badly I feel.	-0.05	-0.11	0.85	-0.04	0.65
26. No matter how badly I feel, I try to think about pleasant things.	0.07	-0.04	0.78	0.08	0.64
13. When I become upset I remind myself of all the pleasures in life.	0.06	-0.00	0.69	0.13	0.53
8. Although I am sometimes sad, I have a mostly optimistic outlook.	0.10	0.07	0.64	-0.06	0.50
19. Although I am sometimes happy, I have a mostly pessimistic outlook.	0.01	-0.25	-0.57	0.22	0.49
12. The best way for me to handle my feelings is to experience them to the fullest.	0.18	0.04	0.11	0.62	0.45
14. My beliefs and opinions always seem to change depending on how I feel.	-0.28	-0.22	-0.08	0.52	0.47
9. When I am upset I realize that the “good things in life” are illusions.	-0.20	-0.26	-0.29	0.44	0.50
10. I believe in acting from the heart.	0.17	0.41	-0.02	0.44	0.43
7. Feelings give direction to life.	0.13	0.32	0.13	0.37	0.34
Factor Intercorrelations		1	2	3	4
Factor 1					
Factor 2		0.29			
Factor 3		0.37	0.29		
Factor 4		-0.07	0.05	0.03	

Note. Salient factor pattern matrix coefficients $> |0.3|$ are in bold face. h^2 = communality. Items were not reverse coded prior to statistical analysis. Factor 2 was reverse scored. Factor 1 = Clarity. Factor 2 = Attention. Factor 3 = Repair. Factor 4 = Receptiveness.

Discussion

The purpose of our research was to further explore the dimensions of the meta-mood experience. Our findings indicate that the meta-mood experience consists of four dimensions, which we named Clarity, Attention, Repair, and Receptiveness.

Clarity, Attention, and Repair match Salovey and Mayer's (1995) original three factors, however, we extracted a fourth factor: Receptiveness. Receptiveness captures the ability to be open to experiencing mood. Additionally, Receptiveness captures how emotions can influence a person's beliefs and drive their actions, which alludes to the influence of emotion on a person's thoughts. Someone who scores high in Receptiveness may use emotion to guide their actions, and changes in mood may be highly impactful on that person's behavior and cognitions. See Table 1 for all items related to Receptiveness.

Additional research into Receptiveness and the other dimensions of the meta-mood experience could reveal more about emotional processes and how the meta-mood experience differs from emotional intelligence. For example, if emotional intelligence is about understanding, processing, and regulating emotions (Pekaar et al., 2018), then emotional intelligence relates to the factors Clarity and Repair, but not necessarily Attention and Receptiveness. Receptiveness may not be in the domain of emotional intelligence; however, it is a part of the meta-mood experience, which involves associations and attitudes about emotions (Mayer & Gaschke, 1988). Receptiveness captures the extent to which emotions influence a person's behaviors and cognitions, which is a new dimension of the meta mood experience not fully explored before.

Our study has implications for researchers, especially those who create tests of mood and meta-mood. The newfound dimension of Receptiveness represents a new way of looking at meta-mood. Researchers looking to create new tests of meta-mood can include Receptiveness to gauge a person's openness to experiencing emotions and to gauge how mood influences a person's thoughts and behaviors. Future research may examine how well Receptiveness influences constructs which previous studies found relate to Attention. For example, the attention one pays to the emotions of others had a weak positive relation to subjective well-being (Lischetzke et al., 2012). Attention was found to negatively relate to physiological characteristics like blood pressure and cortisol levels (Salovey et al., 2002). Future research can look into how Receptiveness relates to subjective well-being, life satisfaction, and physiological reactions related to stress because Receptiveness may differ in how it relates to these and other constructs. Additionally, if Receptiveness is associated with Neuroticism or other measures of mood instability, then those who score low in Receptiveness may endure related experiences such as greater stress reactivity (Salovey et al., 2002; Wong et al, 2007). Future research could examine how Receptiveness relates to these constructs, which may improve our understanding of the meta-mood experience.

Our study had several limitations. One major limitation is that the TMMS is a self-report test. Because of the subjective nature of such a measure, it is possible for individuals to misrepresent themselves. Individuals who pay little attention to their emotions or who are not receptive to their emotions may struggle to respond to some of the items on the TMMS because they may not be accustomed to thinking about their feelings. This lack of experience dealing with emotions could lead to inaccurate reporting on the TMMS. Other limitations related to demographics include the sampling measures used and the type of participants recruited. All participants were recruited from the University of Nevada, Las Vegas and were largely made up of psychology undergraduates, which is not a random, representative sample of the population at large. Additionally, a majority of the participants were female (68.66%), which may skew results. Future researchers could use a more varied population when exploring meta-mood in further studies.

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