Research Guru
Online Journal of Multidisciplinary Subjects (ISSN : 2349-266X)
UGC Approved Journal No. 63726
Impact Factor: 4.081
Volume-12, Issue-3, December-2018 www.researchguru.net

Discerning the Relationship between Curiosity & Exploration and Behavioural Inhibition or Activation among Young Males

Prerna Goyal & Sanya Taneja
Department of Psychology, Jamia Millia Islamia University, Delhi, India
E-mail – prerna.goyal666@gmail.com, tanejasanya3@gmail.com

Abstract: The present study was aimed at discerning the relationship between curiosity & exploration and behavioural inhibition or activation among young males. For the purpose, a sample of 30 males belonging to the age group of 18-25 years was taken. Each group was assessed for their curiosity & exploration index and behavioral inhibition or activation assessed quantitatively with the help of curiosity and exploration inventory by Kashdan, Rose and Fincham (2004) and behavioral inhibition or activation scale by Carver and White (2013). The results of the study indicated that there was a significant level of correlation between curiosity & exploration and behavioral activation ($r=.441$, $p<.05$). However, there was no significant correlation found between curiosity & exploration and behavioral inhibition ($r=.143$). This indicates that curiosity and exploration is related to activation of behavior, however no inferences regarding inhibition of behavior could be made on the basis of curiosity and exploration indices. Also, there was a significant level of correlation found between exploration and behavioral activation system ($r=.436$, $p<.05$), and a significant correlation between absorption and behavioral inhibition system ($r=.475$, $p<.01$). This is indicative that exploratory behavior is related to activation of behavior, and being absorbed in activities inhibits one's behavior.

Key Words: Curiosity, Exploration, Male, Behavioral inhibition and Behavioral activation.

Introduction

Curiosity, especially intellectual inquisitiveness, is what separates the truly alive from those who merely going through the motions.

-Tom Robbins

Curiosity is triggered when something in the physical surroundings attracts our attention or when there is an optimal level of disparity between present knowledge or skills and what these could be if the learner involved in some activity. Berlyne (1960) defined curiosity as a state of emotional arousal which has its basis in conceptual conflict or insecurity, which then impel the search for information or search to resolve this ambiguity. Frijda (1994) confer curiosity as emotion, some other authors (e.g.,Clore, Ortony, & Foss, 1987) explain it as a cognitive state, and Depue (1999) defined it as a core motivational mechanism of the biologically-based system of reward sensitivity. Deci and Ryan (2000) confer it within a scope of intrinsic motivation, which in turn is central to well-being. Curiosity is a prerequisite for the investigation of the environment, as well as the investigation of ourselves and our

ideas and emotions - which leads to the acquisition and integration of new perspectives and experiences (Kashdan, Rose, & Fincham, 2004).

Correlates of curiosity.Findings indicate that being curious is linked with positive subjective experiences; positive evaluations of the self, world, and future; beliefs that goals are attainable and obstacles can be circumvented; self-determined tendencies to recognize, pursue, and thrive in pleasure, excitement, and challenge; and general tendencies to enjoy effortful cognitive endeavors and be open to new experiences and ideas. Curiosity was also found to be negatively related to social anxiety, apathy, boredom and anxiety, which have all been shown to thwart the self-regulation of learning and attentional resources. (e.g., Csiksentmihalyi, 1990). Also, findings suggest positive relationships between curiosity and self-reflection and self-regulatory behaviors. Recent work (Kashdan & Roberts, in press) has shown that curiosity is uniquely associated with the development of interpersonal closeness between strangers, even after controlling for the effects of positive affect.

Exploration. Exploration refers to general appetitive strivings for novelty and challenge irrespective of source (Kashdan, Rose, & Fincham, 2004).

Correlates of exploration.Exploratory behavior has been described in terms of work pursuits (Hazan & Shaver, 1990), meditative exploration (Coy, Green, & Davis, 2012), leisure activities (Carnelly & Ruscher, 2000), and willingness to explore new information and experiences across environmental, intellectual, and social domains (Green & Campbell, 2000; Mikulincer, 1997).Individuals spend more time engaging in a meditative exploration task when alone than with a partner (Coy et al. 2012). This suggests that in situations when there is new information to explore, avoidant individuals generally tend to engage in deactivating cognitive and emotional strategies in the presence of a social partner.

Behavioral Inhibition and Behavioral Activation. The present research focused on Gray's (1987) model of emotion, the existence of two distinct, functionally independent systems for behavioral regulation and motivation - one appetitive and one - aversive has been proposed by several theorists (e.g., Carver, 1996; Diener & Emmons, 1984; Elliot, 1997; Fowles, 1994; Higgins, 1998; Lang, 1995; Watson, Clark, & Tellegen, 1988), which postulates the existence of separate appetitive and aversive.

Behavioral activation.The appetitive system activates behavior in response to signals of reward and non-punishment. Activation of the behavioral activation system is associated with feelings of hope and approach behaviors, whereas activation of the behavioral inhibition system is associated with feelings of anxiety and avoidance behaviors (Gray, 1990). Activity in this system encourages movement towards goals (Leone, Perugini, Bagozzi, Pierro, and Mannetti, 2001). If the Bas recognizes a stimulus as potentially rewarding, it triggers approach behavior (Larsen & Buss, 2002). Carver and White (1994) defined behavioral activation system as composing the following three broad dimensions: Behavioral activation system drive measures the motivation to follow one's goals; behavioral activation system reward responsiveness measures the sensitivity to pleasant reinforcers in the environment; behavioral activation system fun-seeking measures the motivation to find novel

rewards spontaneously. Five items make up this score (e.g., "I crave excitement and new sensations").

Correlates of behavioral activation.The few studies to date that have examined the relationship between behavioral activation system and social functioning have found that it is either unrelated (Blair, 2003) or positively related (Coplan, Wilson, Frohlick, and Zelenski, 2006) to successful social functioning (e.g., social competence, lack of social anxiety). This is not surprising, given that behavioral activation system is associated with extraversion (Mitchell, Kimbrel, Hundt, Nelson-Gray, and Lootens, 2007) and reward seeking behaviors (Carver & White, 1994; Kambouropoulos & Staiger, 2004). That is, people high on behavioral activation would be expected to frequently seek out social rewards, to spend more time in social situations, and to elicit more social support. However, it is also associated with anger (Carver, 2004; Harmon-Jones, 2003) and externalizing disorders such as attention deficit hyperactivity disorder and conduct disorder (e.g., Hundt, Kimbrel, Mitchell, and Nelson-Gray, 2008; Mitchell & Nelson-Gray, 2007), which suggests that it may also be associated with more conflictual relationships and lower levels of social support. In fact, Knyazev (2004) found that, among teens, high behavioral activation was associated with poor relationships with parents.

Behavioral inhibition.Inhibition, in psychology, is conscious or unconscious constraint or curtailment of a process or behavior, especially of impulses or desires. Inhibition serves significant social functions, diminishing or preventing certain impulses from being acted on (e.g., the desire to hit someone in the heat of anger) and enabling the delay of gratification from pleasurable activities. Conscious inhibition is a common manifestation in daily life and is present whenever two conflicting desires are experienced (e.g., the desire to eat a rich dessert versus the desire to lose weight). The aversive system inhibits behavior in response to signals of punishment, non-reward, and novelty and thus inhibits behavior or allegedly brings about avoidance behavior in order to avoid negative or painful outcomes (Carver & White, 1994, Larsen & Buss, 2002). High behavioral activation system is related to enhanced attention, arousal, vigilance and anxiety.

Correlates of behavioral inhibition.Previous research has found that behavioral inhibition is positively associated with social anxiety and social avoidance (Coplan, et al. 2006). Among adults, it has also been associated with increased sexual anxiety (Aluja, 2004) and increased avoidant behaviors in response to relationship distress (Meyer, Olivier, & Roth, 2005). Adults high on behavioral inhibition sensitivity also tend to exhibit anxious attachment (Meyer, et al. 2005) which is characterized by strong fears of loss of the attachment figure, seeking proximity to the attachment figure, and distress at separation. Behavioral inhibition system has been used to explain self-regulation and inhibition of prejudiced responses (Monteith, 1993) and differences in procedural learning under conditions of punishment and reward (Corr, Pickering, & Gray, 1997).

Number of studies has tried to investigate the effect of curiosity and exploration on the levels of behavioral inhibition and activation. At the centre of curiosity is exploration in reaction to novelty and challenge and this suggests a link to fun

seeking, which reflects a willingness to approach a potentially rewarding event and is one of the subscales linked to behavioral activation sensitivity (Carver & White, 1994; Kashdan & Silvia, 2009, Leone et al., 2001). Curious individuals are also more likely to persist in tasks until their goals are met, suggesting a relationship with the drive subscale and reward responsiveness subscale of behavioral activation system (Carever & White,1994; Kashdan & Silvia, 2009). Exploratory behavior is integral to feelings of curiosity and it implies a strong relationship to behavioral activation. Spinella (2005) found that the prefrontal cortex is related to interests in novelty, as lesions in the medial prefrontal cortex will lead to apathy and reduced drive. The behavioral activation is also related to activity in the prefrontal cortex as explained earlier and thus curiosity and behavioral activation might also share similar neurobiological constructs. Kashdan and Roberts (2006) found that curiosity predicted greater positive affect during social interactions than behavioral approach motivation (measured through the total behavioral activation scale of the behavioral inhibition/behavioral activation system) when both were entered as variables in a regression analysis, suggesting that curiosity's drive to seek out unfamiliar, challenging, or novel information may affect emotionality differently than general approach motivation. Curiosity entails a drive to approach new experiences and perceive novelty and uncertainty as rewarding rather than aversive, curiosity has been construed as a specific manifestation of the behavioral activation system (Kashdan & Roberts, 2006).

Lauriola et al. (2015) stated that epistemic curiosity is correlated positively with behavioral activation especially fun seeking, but however, epistemic curiosity is correlated insignificantly with behavioral inhibition.

Since, a number of research studies have focused on the relationship between curiosity & exploration and behavioral activation; however, there have been only a handful of researches conducted to find out the relationship between curiosity & exploration and behavioral inhibition. Thus, the present study focuses to encompass the relationship between curiosity & exploration and behavioral inhibition or activation. Also, it seeks to entail the relationship between exploration and absorption subscales with behavioral inhibition/activation.

For the purpose, data were collected from young males belonging to the age group of 18-25. The identified relationship could further be studied in order to know whether there exists a cause and effect relationship between these variables. Also, keeping in mind the thrusts of the present study, it the results could be replicated on females and across diverse generations.

Method

The present study was aimed at discerning the relationship between curiosity & exploration and behavioral inhibition or activation among young males.

Participants.A sample of 30 males belonging to the age group of 18-25 years was taken.

Instruments. The following two quantitative tools were used:

Curiosity and Exploration Inventory (CEI).A 7-item scale designed to measure respondents' recognition, pursuit, and integration of new and challenging stimuli and experiences (Kashdan, et al. 2004). The scale is divided into two factors: (1)

Absorption (being absorbed in activities) and (2) Exploration (pursuing novelty). Respondents answer each item, such as "Everywhere I go, I am out looking for new things or experiences" using a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Four items represents exploration, and three items represents absorption. Kashdan et al. (2004) found that the curiosity and exploration inventory had a good overall internal consistency (α- 0.72 to 0.82). Also, dicriminant validity was evidenced.

Behavioral Inhibition/Activation Scale.The Behavioral Inhibition/Activation Scale (Carver & White, 1994) is a 24-item self-report scale measuring the sensitivity of behavioral inhibition regulation systems (BIS) and behavioral activation systems (BAS). The behavioral activation system regulates sensitivity to punishment as a motivation and tendency engage in avoidance-oriented behaviors; the behavioral inhibition regulates avoidance-motivated behaviors, and is generally related to negative affect. The behavioral activation system emulates sensitivity to rewards and tendencies to engage in approach-oriented behaviors. Items are recorded on a 1 (Strongly agree) to 4 (Strongly disagree) likert scale. The measure includes four subscales. The behavioral inhibition system echoes sensitivity to and anticipation of punishment (7 items; e.g. "I worry about making mistakes'"). The behavioral activation system reward responsiveness subscale (5 items; e.g., "When I get something I want I feel excited and energized") measures positive responses to the anticipation of or receipt of rewards. The behavioral activation system drive subscale estimates the tendency to seek desired goals (9 items; e.g., "When I want something I usually go all-out to get it."). The behavioral activation system fun seeking subscale (4 items; e.g., "I crave excitement and new situations") reflects an individual's passion for new rewards and willingness to engage in potentially-rewarding events. Initial test development determined adequate inter-item reliability for all subscales except Fun Seeking (α < .70) and moderate test-re-test reliability (α's between .59 and .69; Carver & White, 1994). Also, adequate convergent as well as discriminant validity has been reported.

Analysis. Data collected was scored and descriptive statistics were used to calculate the correlation scores, on the basis of scores received by males on the curiosity and exploration inventory and behavior inhibition/activation scale.

Results

Table 1: Showing correlation scores for young males with respect to their scores on curiosity and exploration (total score) in relation to behavior inhibition/activation:

Curiosity & Exploration (Total Score)	**Behavioral Inhibition**	**Behavioral Activation**
Pearson Correlation	.143	.441*
Significance	.452	.015
N	30	30

Note. *p<.05

Table 2: Showing correlation scores for young males with respect to their scores on curiosity and exploration (exploration & absorption subscale) in relation to behavior inhibition/activation:

Curiosity & Exploration (Exploration Subscale)	**Behavioral Inhibition**	**Behavioral Activation**
Pearson Correlation	-.086	.436*
Significance	.650	.016
N	30	30
Curiosity & Exploration (Absorption Subscale)	**Behavioral Inhibition**	**Behavioral Activation**
Pearson Correlation	.475**	.164
Significance	.008	.385
N	30	30

Note. *p<.05, **p<.01

Interpretation and Discussion

The present study was aimed at discerning the relationship between curiosity & exploration and behavioural inhibition or activation among young males.

The sample consists of 30 males belonging to the age group of 18-25 years. The participants were evaluated on curiosity & exploration and behavioral inhibition or activation by with the help of curiosity and exploration inventory by Kashdan, et al. (2004) and behavioral inhibition and activation scale by Carver and White (2013).

According to Kashdan, et al. (2004) curiosity is a prerequisite for the investigation of the environment, as well as the investigation of ourselves and our ideas and emotions - which leads to the acquisition and integration of new perspectives and experiences and exploration refers to general appetitive strivings for novelty and challenge irrespective of source. Kashdan et al. (2004) explains curiosity and exploration in terms of two factors – absorption i.e. being absorbed in activities and exploration i.e. pursuing novelty.

Carver and White (2004) defined behavioral activation as composing the following three broad dimensions: Behavioral activation system drive measures the motivation to follow one's goals; behavioral activation system reward responsiveness measures the sensitivity to pleasant reinforcers in the environment; behavioral activation system fun-seeking measures the motivation to find novel rewards spontaneously. Behavioral inhibition is a common manifestation in daily life and is present whenever two conflicting desires are experienced (e.g., the desire to eat a rich dessert versus the desire to lose weight). The aversive system inhibits behavior in response to signals of punishment, non-reward, and novelty and thus inhibits behavior or allegedly brings about avoidance behavior in order to avoid negative or painful outcomes.

Looking at Table 1, it is indicated that there is a significant level of correlation between curiosity & exploration and behavioral activation system ($r = .441$, $p < .05$). However, there was no significant level of correlation found between curiosity & exploration and behavioral inhibition system.

Looking at Table 2, it is indicated that exploration subscale showed a significant correlation with behavioral activation system ($r = .436$, $p < .05$), although there was

no significant correlation found between exploration and behavioral inhibition system. While, on the other hand, the absorption subscale indicated significant correlation with behavioural inhibition ($r = .475$, $p < .01$), though there was no significant correlation found between absorption and behavioural activation system. This is indicative that exploratory behavior is related to activation of behavior, and being absorbed in activities inhibits one's behavior.

Carver & White (1994), Kashdan & Silvia (2009) and Leone et al., (2001) stated that at the centre of curiosity is exploration in reaction to novelty and challenge and this suggests a link to fun seeking, which reflects a willingness to approach a potentially rewarding event and is one of the subscales linked to behavioral activation sensitivity. Curious individuals are also more likely to persist in tasks until their goals are met, suggesting a relationship with the drive subscale and reward responsiveness subscale of behavioral activation system (Carver & White, 1994, Kashdan & Silvia, 2009). According to Kashdan & Roberts (2006) curiosity entails a drive to approach new experiences and perceive novelty and uncertainty as rewarding rather than aversive, curiosity has been construed as a specific manifestation of the behavioral activation system.

Lauriola et al. (2015) stated that epistemic curiosity is correlated positively with behavioral activation system especially fun seeking, but however, epistemic curiosity is correlated insignificantly with behavioral inhibition system.

Thus, the present study is parallel to the findings of Carver & White (1994), Kashdan & Silvia (2009), Leone et al., (2001) and Kashdan & Roberts (2006)'s study, and it indicates that there is a significant correlation between curiosity & exploration and behavioral activation system. However, the present study showed contrasting results to the findings of Lauriola et al. (2015)'s study, as it indicates that there is a significant correlation between the absorption subscale of curiosity & exploration and behavioral inhibition system.

Conclusion Thus, from the present study it can be concluded that there was a significant level of correlation between curiosity & exploration and behavioral activation system among young males. However, there was no significant correlation found between curiosity & exploration and behavioral inhibition system. Also, there was a significant level of correlation found between exploration and behavioral activation system, and a significant correlation between absorption and behavioral inhibition system. This is indicative that exploratory behavior is related to activation of behavior, and being absorbed in activities inhibits one's behavior. But, in order for the results to be generalized to the larger population we need to take into consideration a larger sample size. Also, keeping in mind the present study, it would be interesting to replicate the results on females and across diverse generations.

References

Aluja, A. (2004). Sensitivity to punishment, sensitivity to reward and sexuality in females. *Personality and Individual Differences*, *36*(1), 5-10.

Berlyne, D. E. (1960). *Conflict, arousal and curiosity*. New York: McGraw-Hill.

Blair, C. (2003). Behavioral inhibition and behavioral activation in young children: Relations with self-regulation and adaptation to preschool in children attending Head Start. *Developmental Psychobiology*, *42*(3), 301-311.

Carnelley, K. B., & Ruscher, J. B. (2000). Adult attachment and exploratory behavior in

leisure.*Journal of Social Behavior & Personality*, *15*(2), 153-165.
Carver, C. S. (1996). Emergent integration in contemporary personality psychology. *Journal of Research in Personality, 30,* 319-334.
Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS Scales. *Journal of Personality and Social Psychology*, *67*(2), 319-333.
Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS Scales. *Journal of Personality and Social Psychology, 67,* 319-333.
Carver, C. S. (2004). Negative Affects Deriving From the Behavioral Approach System. *Emotion*, *4*(1), 3-22.
Clore, G. L., Ortony, A., & Foss, M. A. (1987). The psychological foundations of the affective lexicon. *Journal of Personality and Social Psychology*, *53*, 751–766.
Coplan, R. J., Wilson, J., Frohlick, S. L., & Zelenski, J. (2006). A person-oriented analysis of behavioral inhibition and behavioral activation in children. *Personality and Individual Differences, 41*(5), 917-927.
Corr, P. J., Pickering, A. D., & Gray, J. A. (1997). Personality, punishment, and procedural learning: A test of J. A. Gray's anxiety theory. *Journal of Personality and Social Psychology*, *73*, 337- 344.
Coy, A. E., Green, J. D., & Davis, J. L. (2012). With or without you: The impact of partner presence and attachment on exploration. *Journal of Experimental Social Psychology*, *48*(1), 411-415.
Deci, E., & Ryan, R. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, *11*(4), 227–268.
Depue R. A., & Collins P. F.(1990). Neurobiology of the structure of personality: dopamine, facilitation of incentive motivation, and extraversion. *Behavioral and Brain Sciences , 22,* 491-517.
Diener, E., & Emmons, R. A. (1984). The independence of positive and negative affect. *Journal of Personality and Social Psychology, 47,* 1105-1117.
Elliot, A. & Church, M. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, *72*(1), 218-232.
Fowles, D. C. (1994). A motivational theory of psychopathology. *Nebraska symposium on motivation, Integrative views of motivation, cognition, and emotion 41*,181-238.
Frijda, N. H. (1994). Emotions are functional, most of the time. In P. Ekman, & R. J. Davidson (Eds.). *The nature of emotion: Fundamental questions,* 112-122.
Gray, J. A. (1987). The psychology of fear and stress. *NewYork: Cambridge University Press.*
Gray, J. A. (1990). Brain Systems that Mediate both Emotion and Cognition. *Cognition* & *Emotion*, *4*, 269-288.
Green, J. D., & Campbell, W. K. (2000). Attachment and exploration in adults: Chronic and contextual accessibility. *Personality and Social Psychology Bulletin, 26*(4), 452-461.
Harmon-Jones, E. (2003). Anger and the behavioral approach system. *Personality and Individual Differences*. *35*, 995-1005.
Hazan, C., & Shaver, P. (1990). Love and Work an Attachment Theoretical Perspective. *Journal* of Personality and Social Psychology, *59*, 270-280.
Higgins, E. T. (1998). Promotion and Prevention: Regulatory Focus as a Motivational Principle. *Advances in Experimental Social Psychology*, *30*, 1-46.
Hundt, N. E., Kimbrel, N.A., Mitchell, J.T., & Nelson-Gray, R.O. (2008). High BAS, but not low BIS, predicts externalizing symptoms in adults. *Personality and Individual Differences, 44,* 565–575.
Kambouropoulos, N., & Staiger, P. K. (2004). Personality and responses to appetitive and aversive stimuli: The joint influence of behavioural approach and behavioural inhibition systems. *Personality and Individual Differences*, *37*(6), 1153-1165.
Kashdan, T. B., & Roberts, J. E. (in press). Trait and state curiosity in the genesis of intimacy:

Differentiation from related constructs. *Journal of Social and Clinical Psychology.*

Kashdan, T. B., Roberts, J. E. (2006). Affective outcomes in superficial and intimate interaction: Role of social anxiety and curiosity. *Journal of research in personality*, *40*, 140-167.

Kashdan, T. B., Rose, P., & Fincham, F. D. (2004). Curiosity and exploration: Facilitating positive subjective experiences and personal growth opportunities. *Journal of Personality Assessment*, *82*, 291-305.

Kashdan, T., Rose, P., & Fincham, F. (2004). Curiosity and Exploration: Facilitating Positive Subjective Experiences and Personal Growth Opportunities. *Journal of Personality Assessment*, *82*(3), 291-305.

Knyazev, G.G. (2004). Behavioral activation as a predictor of substance use: Mediating and moderating role of attitudes and social relationships. *Drug and Alcohol Dependence*, *75* (3), 309-321.

Lang, P. J. (1995). The emotion probe: Studies of motivation and attention. *American Psychologist*, *50*(5), 372-385.

Larsen, R. J., & Buss, D. M. (2002). Personality psychology: domains of knowledge about human nature. *New York: McGaw-Hill.*

Lauriola, M., Litman, J., Mussel, P., De Santis, R., Crowson, H. & Hoffman, R. (2015). Epistemic curiosity and self-regulation. *Personality and Individual Differences*, *83*, 202-207.

Leone, L., Perugini, M., Bagozzi, R., Pierro, A., & Mannetti, L. (2001). Construct validity and generalizability of the Carver-White behavioral inhibition system/ behavioral activation system scales. *European Journal of Personality*, *15*, 373-390.

Meyer, B., Olivier, L., & Roth, D. A. (2005). Please don't leave me! BIS/BAS, attachment styles, and responses to a relationship threat. *Personality and Individual Differences*, *38*(1), 151-162.

Mikulincer, M. (1997). Adult attachment style and information processing: Individual differences in curiosity and cognitive closure. *Journal of Personality and Social Psychology*, *72*(5), 1217-1230.

Mirvis, P., & Csikszentmihalyi, M. (1991). Flow: The Psychology of Optimal Experience. *The Academy of Management Review*, *16*(3), 636.

Mitchell, J. T., Kimbrel, N. A., Hundt, N. E., Cobb, A. R., Nelson-Gray, R. O., & Lootens, C. M. (2007). An analysis of reinforcement sensitivity theory and the five-factor model. *European Journal of Personality*, *21*(7), 869-887.

Monteith, M. (1993). Self-regulation of prejudiced responses: Implications for progress in prejudice-reduction efforts. *Journal of Personality and Social Psychology*, *65*(3), 469-485.

Silvia, P. J., & Kashdan, T.B. (2009). Interesting things and curious people: Exploration and engagement as transient states and enduring strengths. *Social Psychology and Personality Compass*, *3*, 785-797.

Spinella, M. (2005). Self-rated executive function: development of the executive function index. *International Journal of Neuroscience*, *115*(5), 649-667.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and Validation of Brief Measures of Positive and Negative Affect - the Panas Scales. *Journal of personality and social psychology*. *54*, 1063-1070