Are Negative Views of the Self, World, and Future Mediators of the Relationship between Subjective Social Status and Depressive Symptoms*?*

**Abstract**

**Background:** Elevated depressive symptoms are associated with impairments, reduced quality of life, and societal economic burden. A well-established stress-vulnerability model explaining depressive symptoms is Beck’s cognitive theory(1976). An independent line of research demonstrated that a person’s perception of their status in comparison to others’ (subjective social status (SSS)) is a stressor associated with depressive symptoms.

**Aims:** Theory-driven research investigating the interplay of different factors associated with depressive symptoms opens the door to improve the lives of the affected individuals and to reduce the overall societal burden. This study’s aim was to examine if SSS can be integrated as stressor into Beck’s theory, looking specifically whether it impacts depressive symptoms through the individual components (self, world, and future) of the cognitive triad.

**Method:** In this cross-sectional study, 243 community college students (58.6% female; mean age = 23.95) in the southern United States completed self-reports measuring SSS, negative views of the self, world, and future, and depressive symptoms.

**Results:** SSS is negatively associated with each view of the cognitive triad. SSS and views of the self and world are negatively associated with depressive symptoms. Mediation analyses displayed a significant direct effect between SSS and depressive symptoms, as well as two indirect effects via negative view of self and world.

**Conclusions:** While further research is needed, therapists might benefit from our findings when tailoring their treatment to a client by considering their SSS and which negative view is particularly detrimental for this specific client.

Key words: Depressive symptoms; subjective social status; Beck’s cognitive theory; cognitive triad; negative view of future, self, and world

Depression is one of the most common mental disorders, with a 12-month prevalence of 10.4% and a lifetime prevalence of 20.6% (Hasin et al., 2018). Depression is associated with a range of other problems including deficits in social functioning (Kupferberg, Bicks, & Hasler, 2016), reduced quality of life (Saarni et al., 2007), and suicidal behavior (Gesi et al., 2016). Additionally, depression accounts for 3.7% of life years burdened by illness, disability, or lost due to early death (WHO, 2010), and has an annual economic burden of $210.5 billion in the U.S. alone (Greenberg, Fournier, Sisitsky, Pike, & Kessler, 2015). Elevated depressive symptoms that do not meet criteria for a diagnosis are still associated with impairments and reduced quality of life (da Silva Lima & de Almeida Fleck, 2007; Karsten, Penninx, Verboom, Nolen, & Hartman, 2013; Lee, Hasche, Choi, Proctor, & Morrow-Howell, 2013) as well as societal economic burden (Cuijpers et al., 2007). Thus, it is important for therapists to recognize the dimensional nature of depression and to treat both clinical depression and subclinical depressive symptoms. Theory-driven research investigating the interplay of different factors being associated with depressive symptoms can improve the lives of the affected individuals and to reduce the overall societal burden.

**Beck’s Model of Depression**

Beck proposed in his cognitive theory(1976), a stress-vulnerability model, that stressors can activate schemata, the first of four proposed cognitive vulnerabilities, which leads to the activation of the other three cognitive vulnerabilities: cognitive errors, the negative cognitive triad (hereinafter referred to as the cognitive triad), and automatic thoughts. Beck’s theory also postulates that these cognitive vulnerabilities, not the stressor, are associated with depressive symptoms. In other words, the cognitive vulnerabilities are mediators in the association between stress and depressive symptoms. Schemas are a lasting component of the cognitive organization that can be conceptualized as a set of rules that guide a person’s reactions to situations, interpretations, expectancies, and self-instructions (Beck, 1976; Beck & Alford, 2009). Schemas may be dormant for any length of time, but can be activated by one or more stressors that are analogous to the original schema-forming event (i.e., stress(or); Beck, Rush, Shaw, & Emery, 1979). Depressive schemas are negatively polarized and are directed at the self and one’s place in the world, which can lead to cognitive errors (Beck, 1976; Beck & Alford, 2009). Cognitive errors are expressed as negative irrational interpretations of situations that are extreme and absolute in nature (Beck, 1976; Beck et al., 1979). These errors manifest in the form of a negative view of the self, world, and future, forming the cognitive triad (Beck, 1976; Beck et al., 1979). The cognitive triad is expressed through automatic thoughts, or appraisals one makes without full awareness unless attention is focused on the thought (Beck, 1976; Beck et al., 1979).

**Negative Cognitive Triad**

Beck stated that the first component of the cognitive triad, a negative view of the self, can be defined by low self-esteem or regard, beliefs of deficiency, and self-criticisms (Beck, 1976; Beck & Alford, 2009). The second component, a negative view of the world, is characterized by idiosyncratic feelings of loss or views of one’s problems as insurmountable (Beck, 1976; Beck et al., 1979). When an individual perceives themselves as incapable of overcoming problems their outlook on future events may become more negative. The third and final component of the cognitive triad is a negative view of the future (Beck, 1976), leading to feelings of hopelessness and a lost sense of control (Beck, 1976; Beck & Alford, 2009).

Previous research demonstrated that negative view of the self (Beckham, Leber, Watkins, Boyer, & Cook, 1986; Pössel & Thomas, 2011), the world (Beckham et al., 1986; Jacobs & Joseph, 1997; Pössel, 2009; Pössel & Thomas, 2011) and the future (Beckham et al., 1986; Pössel & Thomas, 2011) significantly correlate with depressive symptoms. Research has also continually shown a relationship across different populations including adolescents (Chang, Lin, & Lin, 2007; Pössel, 2017), college-aged students (Pössel & Thomas, 2011; Pössel & Winkeljohn Black, 2014), individuals receiving treatment for depression (Zauszniewski & Rong, 1999), and individuals with intellectual disability (Esbensen & Benson, 2007). However, much of the research on the association between depression and the cognitive triad focuses on the cognitive triad as a whole (Chang et al., 2007; Esbensen & Benson, 2007; Pössel, 2017; Pössel & Winkeljohn Black, 2014; Zauszniewski & Rong, 1999), rather than the individual components. Focusing on the individual components in relation to depressive symptoms may provide vital information on the domains through which depressive symptoms develop in different populations, and in turn help aid to improve the lives of the affected individuals and to reduce the overall societal burden.

**Subjective Social Status**

 Low social status is a social determinant of health (World Health Organization, 2010) that has been consistently linked to depressive symptoms (for a meta-analysis, see Lorant et al., 2003). A person’s subjective social status (SSS; Adler, Epel, Castellazzo, & Ickovics, 2000) encompasses both economic aspects (e.g., access to basic resources; (Adler et al., 2000) and non-economic aspects (e.g., relative prestige compared to peers; (Demakakos, Nazroo, Breeze, & Marmot, 2008)), is a stressor associated with depressive symptoms (Callan, Kim, & Matthews, 2015; Demakakos et al., 2008; Schubert, Süssenbach, Schäfer, & Euteneuer, 2016). As SSS is also associated with pessimism and low perceived control over life (Adler et al., 2000), which both reflect negative views of the world and future (Beck, 1976). These findings demonstrate the relevance of integrating SSS into Beck’s cognitive theory(1976) as stressor associated with the cognitive triad.

**The Current Study**

 Our study examined if SSS can be integrated as stressor into Beck’s stress-vulnerability theory (1976) and if it is related to depressive symptoms through the individual components (self, world, and future) of the cognitive triad. We hypothesized that SSS and each individual component of the cognitive triad are associated with depressive symptoms. Further, we proposed that SSS is related to each individual component of the cognitive triad, observable in the form of SSS being associated with the elements of the cognitive triad. Finally, based on Beck’s cognitive theory (1976), we predicted that each component of the cognitive triad partially mediates the relation between SSS and depressive symptoms.

**Method**

**Participants**

 The sample for our study consisted of 243 students from a community college in an urban area of the southern United States. Our sample ranged in age from 18 to 62 years old (*M* = 23.95, *SD* = 8.62). The gender distribution was 58.6% female and 41.4% male. The sample was predominantly White or European American (50.5%), while the remaining demographics was comprised of 30.3% Black or African American, 9.6% Hispanic or Latino, 3.7% Mixed Race, 3.4% Asian or Asian American, and 0.3% Native American. The range of self-reported income was less than $10,000 per year to over $100,000 per year. The specific break down of the sample’s reported income is as follows: 15.9% reported less than $10,000; 11.0% reported $10,000-$19,999; 19.7% reported $20,000-$29,999; 9.4% reported $30,000-$39,999; 7.8% reported $40,000-$49,999; 8.4% reported $50,000-$64,999; 6.1% reported $65,000-$79,999; 8.1% reported $80,000-$99,999; 10.4% reported more than $100,000; and 3.1% reported their income as other.

**Measures**

 **Center for Epidemiologic Studies – Depression Scale (CES–D).** The CES-D is a brief 20-item self-report questionnaire measuring the frequency of depressive symptoms for the previous week in the general population (Radloff, 1977). Each questionnaire item (e.g. “I felt that everything I did was an effort.”) is rated on a four-point scale ranging from 0 (*rarely or none of the time*) to 3 (*most or all of the time*). The CES-D has four positively worded items that are reverse scored (items: 4, 8, 12, 16). The scores are summed and result in a range from 0 to 60. Radloff (1977) found an internal consistency in general population to be adequate (*α* = .85). Additional research has shown the CES-D to have good test-retest reliability when measured after four weeks (*r* = .53, *p* ≤ .01; Pössel, 2009). Internal consistency reliability of the CES-D in our sample is similar to previous studies and is presented in Table 1.

 **Cognitive Triad Inventory (CTI).** The CTI (Beckham et al., 1986) comprises 36 items that respondents answer on a 7-point Likert scale ranging from 1 (*totally agree*) to 7 (*totally disagree*). Questions on the CTI are phrased both positively and negatively. Each component of the cognitive triad is measured with ten items on a subscale: view of the self (e.g., “I can do a lot of things well.”); view of the world (e.g., “The world is a very hostile place.”); and view of the future (e.g., “There is nothing to look forward to in the years ahead.”). There are six items that are not scored (items: 1, 2, 4, 7, 14, 22). Negative items are reverse scored so that higher scores indicate negative views for all items, then the sum of the items is calculated per subscale and overall. Thus, for each subscale the range is 10 to 70 points and 30 to 210 points for the total scale. Beckham et al. (1986) reported adequate internal reliability for the subscales (view of the self: *α* = .91; view of the world: *α* = .81; view of the future: *α* = .93) and the CTI total scale (*α*  = .95). In the same study, the CTI total score proved to be highly correlated with depressive symptoms measured by the Beck Depression Inventory (*r* = .77, *p* < .001). Internal consistency reliabilities of the three CTI subscales in our sample are presented in Table 1.

 **The MacArthur Scale of Subjective Social Status.** The MacArthur Scale of Subjective Social Status was developed as indicator of where one places themselves across SES aspects (Adler & Stewart, 2007). Participants are asked to mark the rung of a social ladder where they feel they stand in comparison to others in their community. The top rung of the ladder represents people who have the most income and resources available, while the bottom represents those who are worst off with the lowest amount of income and least education (Singh-Manoux, Marmot, & Adler, 2005). The current study instructed participants to include SES aspects when choosing their rank. Validation measurements for this scale are available elsewhere (see, Singh-Manoux, Adler, & Marmot, 2003).

**Procedure**

Approval to conduct this study was granted from both the University’s and the Community and Technical College’s (CTC) Institutional Review Board. Students in Psychology 110 classes, a required part of the curriculum for students at the CTC to receive an Associate of Art or Associate of Science degree, completed the measures. Since the course is required for these student groups, it provides a satisfactory and representative student sample. Six of the 21 (30%) Psychology 110 instructors that were contacted agreed to participate. Data were collected from 12 of 24 (50%) Psychology 110 classes being taught in the Fall of 2015. The surveys were administered during class sessions that the instructors selected to align with the current course topic. The instructors introduced the research team then left for the remainder of the class period since administration took up the entire 75-minute period. This also kept participation anonymous from the instructor, though only three students chose to opt out of participation. Informed consent was attained from the students who chose to participate before they were given the surveys. The order of surveys within the packets was randomized to reduce order effects.

**Data Cleaning and Missing Data Procedures**

The data were cleaned before analyses were calculated. We removed each survey packet that contained random or careless responding. Random or careless responding was determined by a participant completing less than 50% of the survey or by giving the same response to each question. One of 243 surveys contained random or careless responding and was removed, leaving 242 total response sets. Next, we examined missing data and determined that 515 of 59,290, or 0.87%, data points were missing (# of items across all participants). There was no apparent pattern among the missing data. The lack of a pattern implies data to be missing at random (MAR). When such a small percentage of data are MAR from a large data set, it is not cause for concern (Tabachnik & Fidell, 2007; Parent, 2013).

 Available Item Analysis (AIA; Parent, 2013) was selected to address the missing data, given such a small missing percentage. AIA addresses missing data by calculating the mean for each individual scale using the available items. Parent (2013) offered actual and simulated data that implied AIA to be an effective technique for item-level missing data that provides equal performance to multiple imputation (MI) when there is sufficient sample size and scale reliability. AIA results only show bias when missing data is extreme (50%; Schlomer, Bauman, & Card, 2010). Thus, in accordance with Parent (2013), 75% was selected as a level of tolerance for missing data. This means 75% of items in each questionnaire must be completed. The data of any participant who did not reach this level were excluded. Twenty-six of 216 (10.7%) participants were excluded, leaving the final sample size at 190. Excluding 10.7% of cases is not uncommon and within the acceptable range for missing data (Peng, Harwell, Liou, & Ehman, 2006; Schlomer et al., 2010).

 Following AIA, outliers defined as any data point three or more standard deviations (SDs) from the mean were examined (Osborne, 2013). Using this criterion, 14 of 2,808 data points (# of scale scores across all participants), or 0.50% were trimmed.

**Testing Assumptions**

The assumptions of Ordinary Least Squares (OLS) regression were tested after the data were cleaned. Informal evaluation of predictor variable scatterplots for linearity was done initially. In order to assess for normal distribution, a histogram was plotted and visually examined, skew and kurtosis were calculated, and Kolmorgorov-Smirnov and Shapiro-Wilkes tests were applied. Some Kolmorgorov-Smirnov tests and Shapiro-Wilkes tests were significant; however, this is not uncommon with large sets of data (Osborne, 2013). Additionally, normal distribution was determined upon visual inspection and no skew or kurtosis values were at or above an absolute value of one, which back the conclusion that the data is of normal distribution (Osborne, 2013). Next, we examined a plot of residual versus predicted values for homoscedasticity. Finally, we calculated Variance Inflation Factors (VIFs) for the MacArthur Scale of Subjective Social Status scores and each of the three CTI subscales, which were all between 1.060 and 2.315, demonstrating that the assumption of multicollinearity was not violated.

**Hypotheses Testing**

 We conducted one analysis to estimate the direct, indirect, and total effects for depressive symptoms in order to test for mediation effects. The direct effect estimates the effect SSS has on depressive symptoms without going through the views of the cognitive triad, while the indirect effect estimates the effect of SSS on depressive symptoms through each individual view of the cognitive triad. Last, total effect estimates the effect of SSS on depressive symptoms, with and without including each view of the cognitive triad as mediators.

 Hayes’ (2013) PROCESS command tool for SPSS was used to calculate OLS regressions, as well as direct, indirect, and total effects of SSS and each view of the cognitive triad on depressive symptoms. PROCESS commands (Hayes, 2013) use OLS regression procedures in order to calculate direct, indirect, and total effects. Bias-Corrected Bootstrap Interval (BCBI; 5000 bootstrap samples) is created by PROCESS based on a representation of the sampling distribution of the indirect effect that is empirically derived (Preacher & Hayes, 2008). A total, direct, and indirect effect is statistically significant when the BCBI does not include zero.

All described analyses were calculated with the full CES-D scale as well as two shortened CES-D scales. From the first shortened CES-D scale we eliminated items #8 (“I felt hopeful about the future.”) and #9 (“I thought my life had been a failure.”) and from the second shortened CES-D scale we eliniated item #15 (“I thought people were unfriendly to me.”) as well. The scores of all three CES-D scale score correlated between .993 and .998 and as to be expected based on this high correlation, the findings of the OLS regressions and the effects are basically the same across all three CES-D versions. Thus, only the results with the full CES-D scale are presented here.

**Results**

 Table 1 presents means, standard deviations, and internal consistencies for the variables and correlations between the variables used in this study. The mean CES-D score in our sample is between the cut point of mild and moderate depression. The internal consistencies are good with the exception of CTI world scale with a Cronbach’s *α* of .71, which is just below preferred value. All the scales are significantly correlated with each other in the expected direction.

 Our regression analyses demonstrate that SSS is significantly and negatively associated with each of the three views that make up the cognitive triad (view of the self: β = -1.05, SE = 0.32, *p* ≤ .01; view of the world: β = -0.95, SE = 0.27, *p* ≤ .001; view of the future: β = -0.67, SE = 0.33, *p* ≤ .05). Thus, lower SSS is associated with a more negative view of the self, world, and future. Additionally, SSS is significantly negatively associated with depressive symptoms (β = -0.86, SE = 0.30, *p* ≤ .01). Negative views of the self (β = 0.53, SE = 0.09, *p* ≤ .001) and the world (β = 0.23, SE = 0.10, *p* ≤ .05) are significantly positively associated with depressive symptoms, while a negative view of the future is not significantly associated with depressive symptoms (β = 0.12, SE = 0.09, *p* > .05).

 Mediation analyses showed a significant total effect between SSS and depressive symptoms (see Table 2). This association is based on a significant direct effect, but also on two indirect effects. A negative view of the self and world, but not a negative view of the future, significantly mediate the association between SSS and depressive symptoms.

**Discussion**

In our study we sought to integrate SSS as a stressor within Beck’s cognitive theory (1976); more specifically, to investigate its association with the individual components (self, world, and future) of the cognitive triad and depressive symptoms. The results of the study confirmed the hypothesis that SSS predicts each individual component of the cognitive triad and depressive symptoms. In addition, and consistent with our hypotheses, a negative view of the self and the world predicted depressive symptoms. Contrary to our expectation a negative view of the future did not predict depressive symptoms. Similarly, a negative view of the self and the world, but not the future, mediated the relationship between SSS and depressive symptoms. Though unexpected, the latter finding is not unique. For example, Jacobs and Joseph (1997) found view of the future to be unassociated with depressive symptoms with male participants as well, while it was associated to depressive symptoms with female participants.

A possible explanation for the lack of association between the view of future and depressive symptoms in our study may be that each negative view is only a component of the cognitive triad, the same vulnerability within Beck’s cognitive theory (1976). Therefore, one might expect they explain overlapping variance in depressive symptoms and not each component remains significantly associated with depressive symptoms when used in the same analysis. Bivariate correlations between the components of the cognitive triad and depressive symptoms (self *r* = .65; world *r* = .53; future *r* = .51) support this hypothesis. Not only do these correlations show that each component of the cognitive triad substantially correlates with depressive symptoms when examined separately, but we also see the view of future had the lowest numerical correlation with depressive symptoms. Accordingly, if variance explained by the three components overlaps, it would seem logical that the component with the weakest association with depressive symptoms not be significant when each component is simultaneously entered in the same analysis.

While these hypotheses call into question the use of examining the three components of the cognitive triad individually and suggest that the cognitive triad may best be examined as a single entity, there is much data to contradict that approach. Previous factor analyses of the CTI (Anderson & Skidmore, 1995; Pössel, 2009) demonstrated that the components of the cognitive triad should be researched individually. Additionally, previous publications found each component of the cognitive triad differed in association with depressive symptoms (Beckham et al., 1986; Jacobs & Joseph, 1997; Pössel, 2009; Pössel & Thomas, 2011), lending further support for the individual examination of each of the three components.

The cognitive triad may also be conceptualized using the weakest link approach (Abela, Aydin, & Auerbach, 2006; Abela & Sarin, 2002), originally developed for application to inferential styles proposed in the hopelessness theory (Abramson, Metalsky, & Alloy, 1989). In this approach only the most extreme component of the cognitive triad would be examined. To determine the best way to conceptualize and analyze the cognitive triad a future study comparing the different approaches is needed.

Another interesting finding of this study is the direct effect of SSS on depressive symptoms that remains significant along with the two mediating effects of the view of the self and world. This finding may indicate the existence of more mediators. As the cognitive triad is a component within the Beck’s cognitive theory (1976), the other cognitive vulnerabilities (i.e., schemata; cognitive errors, & automatic thoughts) may serve as additional mediators for the effect of SSS on depressive symptoms. This hypothesis is supported by previous findings that other vulnerabilities within Beck’s theory (1976) are mediators for depressive symptoms as well as for the other cognitive vulnerabilities within Beck’s theory (Pössel & Winkeljohn Black, 2014; Pössel, 2017).

**Strengths and Limitations**

The first strength of our study is that our sample was recruited from a community college and is diverse in age, ethnicities/racial identities, income level, and life experiences. The diversity of our sample provided the opportunity to better understand how depressive symptoms are affected by SSS and the three components of the cognitive triad in individuals of diverse backgrounds and gave information that can inform the way the cognitive triad is conceptualized in future research.

A second strength of our study is the examination of the individual components of the cognitive triad in the relationship between SSS and depressive symptoms. Prior research has shown a relationship between the cognitive triad and depressive symptoms (Chang et al., 2007; Esbensen & Benson, 2007; Pössel, 2017; Pössel & Winkeljohn Black, 2014; Zauszniewski & Rong, 1999), but the individual components have not been given the same empirical attention. Also, SSS has been found to be related to mental health (Sing-Manoux et al., 2005), and more specifically depressive symptoms (Callan, Kim, & Matthews, 2015; Demakakos et al., 2008). We integrated the previously unrelated research on SSS and depressive symptoms with research examining the cognitive triad and depressive symptoms.

Last, as the majority of prior research examining the cognitive triad and depressive symptoms focus on the cognitive triad as a whole (Chang et al., 2007; Esbensen & Benson, 2007; Pössel, 2017; Pössel & Winkeljohn Black, 2014; Zauszniewski & Rong, 1999), our study is also the first to examine the individual components of the cognitive triad as proposed in Beck’s cognitive theory (1976) and SSS and depressive symptoms.

Our study was limited by recruitment from just one community college in the southern United States, reducing the generalizability to other regions of the United States, students attending traditional four-year institutions, or individuals living outside of the United States. Second, the sole use of self-report instruments could lead to bias by the respondent due to either over or under reporting, or the amount of self-disclosure from respondents. Third, using a cross-sectional design means we are unable to draw conclusions regarding the true directionality and causality of the relations between SSS, the cognitive triad, and depressive symptoms.

**Conclusion**

 Our study was the first to examine if SSS can be integrated as stressor into Beck’s stress-vulnerability theory (1976), particularly if SSS is associated with depressive symptoms through the individual components (self, world, and future) of the cognitive triad. Our main results show that negative view of self and world, but not negative view of future, mediate this relation and that a significant relation between SSS and depressive symptoms remained. Based on our findings, future studies should further examine the best way the cognitive triad is conceptualized (as one construct, three individual components, weakest link). Further, one may suggest a presence of additional factors that affect the relation between SSS and depressive symptoms. A logical extension of our study would be to test the other cognitive vulnerabilities proposed by Beck (1976) as potential mediators. Additional investigation into the relation SSS has with the cognitive triad and other elements of Beck’s cognitive model and depressive symptoms would provide more information that can help to shape and advance the treatment of depressive symptoms. A larger sample incorporating multiple regions of the United States would provide a more representative and diverse sample. Finally, utilizing a longitudinal design would give the opportunity to examine the directionality of the relations between the studied variables.

 While further research is needed, our findings have clinical implications and indicate that SSS can be integrated into Beck’s cognitive theory of depression (1976). Therapist may consider SSS when examining possible stressors. In addition, because the negative views of the self and the world mediate the impact of SSS on depressive symptoms, therapists might want to consider which of the negative views are particularly relevant for an individual client. This approach allows therapists to tailor their treatment to a particular client by considering their SSS and which negative view is particularly detrimental for this specific client. To be more precise, a therapist could consider focusing on the negative view of the self and the world of a client when questioning and restructuring their negative cognitions. Summarized, the findings of our study have some utility for case conceptualization and treatment of depressive symptoms with clients from lower SSS.

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Table 1

*Means, Standard Deviations, and Internal Consistencies for and Correlations between Subjective Social Status, Cognitive Triad, and Depressive Symptoms (N = 190)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | SSSS | CTI-self | CTI-world | CTI-future | CES-D |
| SSSS | -- |  |  |  |  |
| CTI-self | -.22\*\*\* | .81 |  |  |  |
| CTI-world | -.23\*\*\* | .63\*\*\* | .71 |  |  |
| CTI-future | -.14\* | .69\*\*\* | .55\*\*\* | .87 |  |
| CES-D | .30\*\*\* | .65\*\*\* | .53\*\*\* | .51\*\*\* | .90 |
| Mean | 5.72 | 24.91 | 29.18 | 20.38 | 16.78 |
| SD | 1.92 | 9.09 | 7.82 | 9.24 | 10.88 |

Note. Numbers in diagonal represent Cronbach’s *α*, *Note.* Data for the indirect effects are bootstrapped (5000 samples). CL = Confidence limit; SSSS = MacArthur Subjective Social Status Scale, CTI = Cognitive Triad Inventory, self = view of the self scale, world = view of the world scale, future = view of the future scale, CES-D = Center for Epidemiological Studies – Depression Scale. +*p* ≤ .10; \**p* ≤ .05; \*\**p* ≤ .01; \*\*\**p* ≤ .001

Table 2

*Total, Direct, and Indirect Effects and their Confidence Intervals Testing for Multiple Mediations (N = 190)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Effects | Standard Errors | Lower 95% CL | Upper 95% CL |
| **Total effect** |  |  |  |  |
| SSSS – CES-D | -1.707 | 0.373 | -2.443 | -0.971 |
| **Direct effect** |  |  |  |  |
| SSSS – CES-D | -0.859 | 0.298 | -1.446 | -0.271 |
| **Indirect effects from SSSS to CES-D by** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CTI-self | -0.555 | 0.230 | -1.100 | -0.169 |
| CTI-world | -0.216 | 0.103 | -0.486 | -0.058 |
| CTI-future | -0.078 | 0.087 | -0.343 | 0.016 |

*Note.* Data for the indirect effects are bootstrapped (5000 samples). CL = Confidence limit; SSSS = MacArthur Subjective Social Status Scale, CTI = Cognitive Triad Inventory, self = view of the self scale, world = view of the world scale, future = view of the future scale, CES-D = Center for Epidemiological Studies – Depression Scale.