

**Negative Emotion, Job Satisfaction, and Coping Strategy: A Mediation Model in the
Entrepreneurial Context**

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PSB3E-BT15: Bachelor Thesis

Group number 25

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Month 01, 2022

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Abstract

In the present research, we investigated the links between negative emotions and job satisfaction, and how the relationship is mediated by Problem- and Emotion-Focused Coping in early-stage entrepreneurs. Our research is based on the Affective Events Theory and Transactional Theory of Stress. Previous research has concluded that negative emotions have a negative effect on job satisfaction. Further, previous research has concluded that coping has an effect on job satisfaction and linked low arousal emotions to Problem-Focused Coping and high arousal emotions to Emotion-Focused Coping. We proposed a mediation model where Emotion-Focused Coping mediates the relationship between negative high arousal and job satisfaction, and where Problem-Focused Coping mediates the relationship between negative low arousal emotions and job satisfaction. Further, we investigated the effect of negative medium arousal emotions on job satisfaction and what coping strategy they are associated with. We used a cross-sectional study design with a convenience sample of entrepreneurs filling out an online questionnaire. N=204 entrepreneurs were sampled. Negative emotions had a negative relationship with job satisfaction. Low arousal emotions were predictive of Problem-Focused Coping, but coping was not predictive of job satisfaction. Medium arousal had the strongest negative relationship with job satisfaction. The link between negative emotions and job satisfaction was significant without coping. We found no support for our mediation model. This research highlights the importance of studying the stress and strain of entrepreneurs. We extended research of negative emotions across levels of arousal by investigating medium arousal emotions more.

Keywords: Affective Events Theory, Job Satisfaction, Negative Emotions, Coping, Transactional Stress Theory

Negative Emotion, Job Satisfaction, and Coping Strategy: A Mediation Model in the Entrepreneurial Context

In the 21st century, the amount of Small and Medium Enterprises (SME) has been on the rise, and they make up a large percentage of enterprises all over the world. For instance, it is estimated that SMEs makeup 99.7% of the enterprises across the US and account for roughly 3.6 million employees between 2016-2020 in the Netherlands (Statista Research Department, 2020). According to Onuoha (2007), Entrepreneurship can be defined as “the practice of starting new organizations or revitalizing mature organizations, particularly new businesses generally in response to identified opportunities”. Many people see the benefits of being your own boss or founding a business. A few of the appeals of entrepreneurship include financial rewards, independence, or not having to deal with an unreasonable boss (Holly & Buttner, 1992). Entrepreneurship is considered to be an important contributor to economic growth and economic development, through employment possibilities, capital being spent, innovation, and ideas (Fernet et al., 2016). Only in America, over 500,000 businesses are founded each year, but according to the U.S. Bureau of Labour Statistics over half of SMEs fail within the first 5 years (Jordan, 2014).

Entrepreneurs have to be innovative, quick to act, need to solve occurring problems or overcome adverse work events to protect their venture. In addition, they face high levels of stress due to periods of uncertainty, long working hours, and being responsible for one’s future, the future of the business, and possibly of employees (Lechat & Torrès, 2017; Schindehutte et al., 2006; Toren, 2015) Consistent high levels of stress can be detrimental to health and are highly correlated with negative emotions (Brown et al., 2005; Folkman & Lazarus, 1988; Lechat & Torrès, 2017) One important link that has been shown in previous research is the connection between negative emotions and their link to job satisfaction that can be explained by the Affective Events Theory (Weiss & Cropanzano, 1996).

Entrepreneurial stress and the stressful work environment cause work events like daily hassles or adverse work events. Adverse work events cause the entrepreneur to experience an emotion which then affects work attitudes such as job satisfaction (Weiss & Cropanzano, 1996) When being exposed to negative emotions and stress one turns towards coping, to deal with the stressor, according to the transactional theory of stress and coping (Biggs et al., 2017; Krohne, 2002). People use coping strategies, which affect their behavior and response to stress and negative emotions. To cope with adverse work events, there are two main classes of coping: Problem-Focused Coping and Emotion-Focused Coping (Folkman & Lazarus, 1988). Previous research has been focusing on the satisfaction of employees and little research has been conducted on the satisfaction of entrepreneurs (Diefendorff et al., 2008; Faragher et al., 2005; Forgas & George, 2001; Reizer et al., 2019; Welbourne et al., 2007). In this research, we would like to shed light on the effects of negative emotions on the job satisfaction of SMEs.

Literature Review

Our research is based on the Affective Events Theory (AET). According to Weiss and Cropanzano (1996), people react to adverse events emotionally. Adverse work events are subjective and not everyone reacts the same way (Lechat & Torrès, 2017). In the AET, emotions are understood as an affective state. These affective states then affect satisfaction, which is an evaluative judgment one makes, comparing actual outcomes with those that are desired (Reizer et al., 2019; Weiss & Cropanzano, 1996). The AET highlights the causes, consequences, and the structure of affective experiences in the workplace.

In our research, we will focus on negative experienced emotions. One way of categorizing emotions is the so-called Circumplex Model of Emotions by Russell (van Katwyk et al., 2000): Emotions can be categorized in a compass-like, circular model with pleasure and arousal defining the space of the model. The closer emotions are to each other,

the closer they are related. This model acknowledges emotions are highly intercorrelated (van Katwyk et al., 2000).

According to Brown (2005), a negative work event causes negative emotion in the individual. The individual then analyses the situation, how much it implicates the personal well-being, the well-being of the organization or venture, and how much it affects personal goals. This then affects performance and job satisfaction (Weiss & Cropanzano, 1996). Yongsatianchot & Marsella (2021) argue that one does not feel an emotion by itself but in connection with someone or something. For instance, one usually is not just angry, but angry about something or at someone. Stress in medium levels has been shown to enhance performance and the motivation to overcome a problem, in higher levels it is linked to a big list of psychological outcomes such as hypertension, arteriosclerosis, angina, ulcers, hypertension, job burnout, and a negative relationship with job satisfaction (Holly & Buttner, 1992; Shepherd et al., 2010). An increased level of job satisfaction has been linked to higher subjective well-being and objective health (Ashkanasy & Daus, 1993; Reizer et al., 2019; Weiss & Cropanzano, 1996). A lowered level of job satisfaction has a strong association with job burnout, depression, anxiety, and other psychological and physiological outcomes (Faragher et al., 2005; Fernet et al., 2016). We distinguish between low, medium, and high arousal emotions based on Katwyk et al. (2000), arguing that job effect can and should be explained two dimensional, with arousal being one of the dimensions, and pleasantness being the other one. Therefore, we hypothesize:

H1: High, medium, and low arousal negative emotions have a negative effect on job satisfaction

No research has been conducted on the effect of medium arousal emotions on job satisfaction. We would like to know: what effect do medium arousal emotions have on job satisfaction?

Coping strategies have been shown to be effective when dealing with problems (Ben-Zur, 2009; Brown et al., 2005; Folkman & Lazarus, 1988; Griffith et al., 1999; Stanisławski, 2019; Thompson et al., 2020; Welbourne et al., 2007) According to the Transactional Theory of stress (Kemper & Lazarus, 1992) the relationship between negative emotions and work attitudes, such as job satisfaction, is mediated by the choice of coping strategies. One evaluates through primary appraisal to what extent the negative emotions or problem is threatening goal-directed behavior, status, or overall health. Through secondary appraisal, one then analyses how to deal with the problem at hand.

While Problem-Focused Coping is about “managing or altering the problem causing the distress”, Emotion-Focused Coping is about “regulating emotional responses to the problem” (Stanisławski, 2019) Low arousal negative emotions have been linked to the use of Problem-Focused Coping, high arousal emotions have been linked to the use of Emotion-Focused Coping strategies. Little research has been conducted on what coping strategy medium arousal emotions are linked to (Stanisławski, 2019). We would like to know, what choice of coping strategy is more prevalent when experiencing medium arousal emotions? We suggest H2 and H3:

Hypothesis 2: Experiencing low arousal emotions is associated with higher use of Problem-Focused Coping strategies.

Hypothesis 3: Experiencing high arousal emotions is associated with higher use of Emotion-Focused Coping strategies.

Problem-focused coping can be both action-oriented coping strategies like active coping, or cognitive decision-making coping strategies like planning (Welbourne et al., 2007). Carver et al. (1989) suggested that those two dimensions are insufficient and suggested 13 dimensions of coping that are associated with the two main categories of Problem-Focused Coping and Emotion-Focused Coping. The five sub-dimensions of Problem-Focused Coping

were: “active coping, planning, suppression of competing activities, restraint coping, seeking social support for instrumental reasons“, the five sub-dimensions of Emotion-Focused Coping were: “seeking social support for emotional reasons, positive reinterpretation and growth, acceptance, denial, turning to religion“, and the remaining three were considered less useful strategies: “focus on and venting of emotions, behavioral disengagement, mental disengagement” (Stanisławski, 2019). Research on what coping strategies are more successful depends on the situation that one is in, how much entrepreneurial experience the owner has, and how severe the adverse work event is (Thompson et al., 2020). Nonetheless, Problem-Focused Coping strategies might lead to more tangible solutions to problems, according to Welbourne (2007). This, in return, might then lead to an increase in job satisfaction. According to Welbourne (2007) Problem-Focused Coping strategies were linked to higher job satisfaction, whereas Emotion-Focused Coping was linked to lower job satisfaction overall. Coping strategies accounted for over 20% of the variance of job satisfaction in their research. Research on the effects of different coping strategies has shown different results on how effective certain strategies are. Problem-Focused Coping strategies have been shown to have a positive relationship with positive affect and a negative relationship with negative affect. Avoidance coping, which is an Emotion-Focused Coping strategy, showed the reverse pattern (Ben-Zur, 2009). Therefore, we would like to test those previous research findings.

Hypothesis 4: Problem-Focused Coping has a positive effect on job satisfaction

Hypothesis 5: Emotion-Focused Coping has a negative effect on job satisfaction

Since the level of arousal was linked to the choice of coping style and coping strategies were linked to having an effect on job satisfaction, we propose a mediation model between the level of arousal, coping, and job satisfaction (Ben-Zur, 2009; Biggs et al., 2017; Carver, 1997; Krohne, 2002; Stanisławski, 2019; Thompson et al., 2020; van Katwyk et al.,

2000; Weiss & Cropanzano, 1996; Welbourne et al., 2007). We suggest the following two hypotheses:

Hypothesis 6: The relationship between low arousal emotions and job satisfaction is mediated by Problem-Focused Coping.

Hypothesis 7: The relationship between high arousal emotions and job satisfaction is mediated by Emotion-Focused Coping.

We hypothesize the following research model.

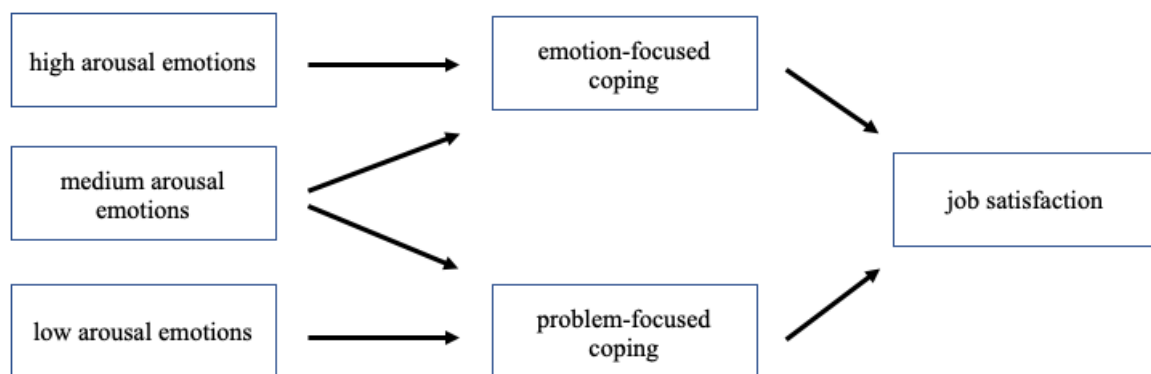


Figure 1. Copings strategy as a mediator between the level of arousal and job satisfaction

Method

Participants

The total sample size was 204, of which 68 indicated that they did not experience a negative work event. Therefore, they were excluded. The age ranged from 19 to 67, with a mean age of 30.88. Out of all participants, 71.3% indicated being male (n=92), 27.1% indicating being female (n=35), and 1.6% (n=2) indicated non-binary. Out of all participants, 61.4% obtained a university degree, 7.6% received a (Technical) Secondary School diploma, 6.1% received a Doctorate Degree, 16.3% a secondary school degree and 6.8% indicated “other”. The mother tongues were English (26.5%), Dutch (13.6%), and other (57.6%). 32.6% reported that they own their business alone, whereas 64.4% reported co-owning their

business. 51.9% of the entrepreneurs indicated they work another job or study while they work as an entrepreneur, 48.1% indicate that they solely work as an entrepreneur.

Design

Our study was a cross-sectional online study. The participants filled out two questionnaires one week apart from each other.

Procedure

This online cross-sectional study included a sample that consists of three parts; the first part of the sample was collected by students of the University of Kashipur, approaching entrepreneurs who participated in an on-site training course about entrepreneurship. The second part of our sample was collected by the students of the University of Groningen who worked on their bachelor thesis beginning-mid of 2021. The third part of our sample was collected by the students of the University of Groningen writing their bachelor thesis end of 2021 using a convenience sample of entrepreneurs within the indirect or direct social circle of the students and entrepreneurs that were recruited via email or in person. The questionnaire was in English and also had to be completed in English. Participation in the study was entirely voluntary, no incentives were offered. In the beginning of the online questionnaire, participants were given information about the study, as well as an informed consent form, followed by questions of demographic nature. The participants then had to answer an online survey consisting of items about the entrepreneur's mental health, physical health, entrepreneurial coping, and the experience of negative events. Our research was accepted by the Ethics Committee of the University of Groningen. The data collection began on 21.10.2021 and ended on 29.11.2021.

Measures

Negative Emotions

Negative emotions were conceptualized using the Diefendorff et al. (2008) & Katwyk et al. (2000) approach. The participants had to indicate on a Likert scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*) across 15 emotions how an event in the past week made them feel. The emotions included angry, anxious, disgusted, frightened, furious, annoyed, confused, frustrated, intimidated, miserable, bored, depressed, discouraged, fatigued, and gloomy. Each of the 15 emotions can be categorized between low, medium, and high arousal using Katwyk's (2000) two-dimensional model of job-related affective well-being. We computed the mean for high arousal emotions, medium arousal emotions, and low arousal emotions. The Cronbach's alpha were 0.715, 0.678, 0.831, respectively.

Coping Strategy

Coping strategies were assessed using the Brief COPE (Carver, 1997) of which we included 12 different strategies. Per strategy, we included two items each, making it 24 in total. The strategies included were active coping, planning, positive reframing, acceptance, humour, using emotional support, self-distraction, denial, venting, behavioral disengagement, self-blame. Each strategy was conceptualized with statements like "I've been trying to come up with a strategy about what to do" for planning, or "I've been looking for something good in what has happened" for positive reframing. Each item is rated on a Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). Problem-Focused Coping and Emotion-Focused Coping were conceptualized based on Litman (2006) and Carver (1997). The coping strategies active coping, planning, and instrumental support were categorized as Problem-Focused Coping. The coping strategies emotional support, acceptance, denial, and positive reinterpretation were conceptualized as Emotion-Focused Coping. The Cronbach's alpha for Problem-Focused Coping is .812 and .646 for Emotion-Focused Coping. We proceeded to compute the means and use them in our analysis.

Job Satisfaction

Job satisfaction was conceptualized by Judge et al., (1994) and consisted of three items in our survey. Firstly, participants indicate how satisfied they are overall with their job as an entrepreneur. Secondly, they indicate how unhappy they feel on average with their job as an entrepreneur and thirdly, they indicate how happy they feel on average with their job as an entrepreneur. The Cronbach's Alpha for all job satisfaction variables is .721. Therefore, we computed the mean and used it as the dependent variable.

Control Variables

Meta-analysis has shown that there were gender differences between the effect of negative emotions and job satisfaction (Aydin et al., 2012). In this study, men had lower job satisfaction. Further, there was research on sex differences when choosing coping strategies (Kelly et al., 2008). Women might tend to use more Emotion-Focused Coping strategies, whereas men tend to use more Problem-Focused Coping strategies. Therefore, we added gender as a control variable for our linear regressions. Since there were only two people indicating that they identify as non-binary, the group was not big enough for us to make interferences about it. We proceeded to only include male and female. We coded the variable gender with 1= man, 0= woman.

Previous research states that entrepreneurs who founded the business might show higher job satisfaction due to perceived discretion (Lauto et al., 2020). 13 participants indicated that they were not involved in the founding process. Therefore, we controlled for the founding role of the entrepreneur (0= not involved, 1= involved in business foundation)

Results

Analysis Plan

To check our hypothesis, we started by checking the assumptions for linear regression. We checked normality and linearity using P-P Plots and Q-Q Plots, which can be found in the Appendix, as well as skewness and kurtosis. Further, we checked the assumption of

homoscedasticity by analysing the residual plots. Additionally, we determined outliers by calculating the cook's distance and the cut-off score, as well as using boxplots. All scores above our computed cut-off score will be removed. Finally, we will conduct linear regression to first test the direct link between the level of arousal and job satisfaction, and follow with the indirect links between emotions and coping, as well as coping and job satisfaction. Lastly, we will analyze the mediation model as hypothesized.

Preliminary Results

Our analysis was done using the software SPSS (version, team). Checking the QQ-Plots, PP-Plots and Boxplots did not show any evidence for violation of the assumptions. Kurtosis and skewness are both within a reasonable range (George & Paul Mallery, 2010; Hair et al., 2010); the skewness does not exceed -1 to 1, and the kurtosis does not exceed -1 to 1. Therefore, we assume that the assumptions are not violated but met. Below in Table 1, the Pearson's r-correlations can be found.

Table 1

	JobSa	HighA	MediumA	LowA	PFC	EFC
JobSa	-					
HighA	-.307**	-				
MediumA	-.353**	.628	-			
LowA	-.353**	.412**	.616**	-		
PFC	-.010	.173	.138	.229*	-	
EFC	.090	-.038	.052	.114	.387**	-

* Correlation is significant at the 0.01 level (2-tailed)

** Correlation is significant at the 0.05 level (2-tailed)

Note: all correlations are Pearson's r-correlations and missing data points were excluded pairwise.

Hypothesis tests

To test hypothesis 1, that high arousal and low arousal emotions have a negative effect on job satisfaction, we conducted two linear regressions, firstly regressing high arousal

emotions on job satisfaction. The results of the analysis can be seen in Table 2. The effect of high arousal emotions on job satisfaction was significant $R^2 = .084$, $F(1, 125) = 11.519$, $p > 0.001$. The relationship is negative and significant. Secondly, we regressed low arousal emotions on job satisfaction. The coefficients can be found in Table 2. The link between low arousal emotion and job satisfaction was significant $R^2 = .113$, $F(1, 120) = 15.249$, $p > 0.001$. Therefore, we find support for our hypothesis: there is a negative relationship between the independent and dependent variable. Adding the control variables, gender and founder did not affect the results substantially.

To answer our first research question, what effect medium arousal emotions have on job satisfaction, we conducted a linear regression. The effect was significant $R^2 = .120$, $F(1, 124) = 16.882$, $p > 0.000$. Adding gender and founder did not affect the results substantially. Overall, negative emotions seem to be very predictive of job satisfaction $R^2 = .166$, $F(3, 118) = 7.154$, $p > 0.000$. Gender and founder did not change the results substantially.

To answer our second research question, what choice of coping strategy is more prevalent when experiencing medium arousal emotions, we conducted two linear regressions between medium arousal emotions and Problem-Focused Coping (PFC) and Emotion-Focused Coping (EFC), which can be seen in Table 2. The linear regression between medium arousal emotions and PFC was non-significant $R^2 = .018$, $F(1, 124) = 2.294$, $p = 0.132$. The link between medium arousal and EFC was also found non-significant $R^2 = .003$, $F(1, 128) = 0.405$, $p > 0.526$. The coefficients can be found in Table 2. Since both linear regressions were non-significant, we cannot make inferences about the choice of coping strategy when being experiencing medium arousal emotions. Adding gender and founder for both links as control variables had no substantial effect.

To test Hypothesis 2, whether experiencing low arousal emotions is associated with higher use of PFC, we conducted a linear regression, regressing low arousal emotions on

Problem-Focused coping. The link was found to be significant $R^2 = .055$, $F(1, 120) = 6.967$, $p > 0.009$. The link between low arousal and EFC was non-significant $R^2 = .013$, $F(1, 120) = 2.043$, $p > 0.156$. Controlling for gender and founder for both links was non-significant. We find support for hypothesis 2.

To test Hypothesis 3, whether experiencing high arousal emotions is associated with higher use of EFC, we conducted a linear regression. The link was found to be non-significant, $R^2 = .000$, $F(1, 125) = 0.179$, $p > 0.803$. The link between high arousal and PFC was significant $R^2 = .033$, $F(1, 125) = 4.228$, $p > 0.042$. Controlling for gender and founder did not change the results substantially. We find no support for Hypothesis 3.

Overall, emotions across all three different levels were significant when regressing with PFC as the dependent variable $R^2 = .069$, $F(3, 118) = 2.917$, $p > 0.037$. The link between all levels of arousal and EFC was not significant $R^2 = .027$, $F(1, 118) = 1.11$, $p > 0.347$. Adding gender and founder as control variables did not have a substantial effect.

To test Hypothesis 4, whether PFC has a positive effect on job satisfaction, we conducted a linear regression. The coefficients can be found in Table 2. The link was found to be non-significant $R^2 = .000$, $F(1, 125) = 0.002$, $p > 0.951$. Gender and founder did not have a substantial effect. We find no support for Hypothesis 4.

To test Hypothesis 5, whether EFC has a negative effect on job satisfaction we conducted a linear regression, the analysis can be found in Table 2. The link was found to be non-significant $R^2 = .014$, $F(1, 125) = 1.759$, $p > 0.187$. Adding gender and founder makes the regression significant at $R^2 = .073$, $F(3, 118) = 3.111$, $p > 0.029$. We find no support for hypothesis 5 and gender and founder might be confounding variables.

Overall, when conducting linear regression with PFC and EFC as independent variables and Job Satisfaction as the dependent variable, the link was found to be non-

significant $R^2 = .016$, $F(1, 124) = .990$, $p > 0.374$. Adding gender and founder did not have a substantial effect.

To test hypothesis 6, that the relationship between low arousal emotions and job satisfaction is mediated by PFC, we used the PROCESS macro for SPSS. We obtained the following output for the mediation model $R^2 = 0.1127$, $F = 15.2458$, $p = 0.002$. However, the coefficient PFC is not significant. Therefore, the main effect is predictive without the mediation variable. 10000 bootstrap samples were computed and the bootstrap confidence interval ranges from -0.0126 to 0.0562 containing 0, which means that the effect might be non-significant. We find no support for hypothesis 6. Gender and founder did not change the results substantially.

To test hypothesis 7, that the relationship between high arousal emotions and job satisfaction is mediated by EFC, we used the PROCESS macro for SPSS. We obtained the following result $R^2 = 0.0968$, $F = 6.6427$, $p > 0.0018$. However, the mediation variable EFC was not significant, while High Arousal was significant. Therefore, the main effect is significant without the mediation variable. 10000 bootstrap samples were conducted, resulting in a confidence interval ranging from -.0239 to .0157. The interval includes 0, so the mediation variable is not significant. There might not be an effect present, we find no support for Hypothesis 7. Adding gender and founder was not significant did not have a substantial effect on the results.

Table 2

Hypothesis 1	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
Considered Path					
High Arousal → Job Satisfaction	-.213	.063	.001	-.337	-.099

Considered Path	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
High Arousal → Job Satisfaction	-.213	.063	.001	-.337	-.099

Low Arousal → Job Satisfaction	-0.215	.055	>.001	-0.324	-0.106
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Research Question 1

Considered Path	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
Medium Arousal → Job Satisfaction	-0.259	.063	>.001	-0.384	-0.134

Direct Link

Negative Emotions → Job Satisfaction	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
Low Arousal	-0.114	.069	.102	-0.251	.023
Medium Arousal	-0.162	.096	.094	-0.353	.028
High Arousal	-0.039	.082	.631	-0.201	.122

Research Question 2

Considered Path	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
Medium Arousal → PFC	.107	.071	.132	-0.033	.247

Considered Path	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
Medium Arousal → EFC	.034	.053	.526	-0.071	.139

Hypothesis 2

Considered Path	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
Low Arousal → PFC	.162	.062	.009	.041	.284

Considered Path	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
Low Arousal → EFC	.067	.047	.156	-0.026	.160

Hypothesis 3

Considered Path	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
High Arousal → EFC	-0.013	.052	.803	-0.115	.089

Considered Path	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper

High Arousal → PFC	.141	.068	.042	.005	.276
Hypothesis 4				<u>95% CI</u>	
	Unstandardized				
Considered Path	Estimate	SE	<i>p</i>	Lower	Upper
PFC → Job Satisfaction	.005	.084	.951	-.162	.172
Hypothesis 5				<u>95% CI</u>	
	Unstandardized				
Considered Path	Estimate	SE	<i>p</i>	Lower	Upper
EFC → Job Satisfaction	.149	.113	.187	-.074	.373
Hypothesis 6				<u>95% CI</u>	
	Unstandardized				
Considered Path	Estimate	SE	<i>p</i>	Lower	Upper
Low Arousal → PFC → Job Satisfaction	.057	.082	.490	-.106	.219
Hypothesis 7				<u>95% CI</u>	
	Unstandardized				
Considered Path	Estimate	SE	<i>p</i>	Lower	Upper
High Arousal → EFC → Job Satisfaction	0.141	.108	.195	-.073	.356

Note: Unstandardized Estimate: B

95% CI = Confidence Interval

SE = Standard Error

PFC = Problem-Focused Coping

EFC = Emotion-Focused Coping

Discussion

Based on the Affective Events theory and the Transactional Stress Theory (Biggs et al., 2017; Weiss & Cropanzano, 1996), this paper explored the relationship between negative emotions of different levels of arousal and their effect on job satisfaction, and how this relationship is mediated by Problem-Focused Coping and Emotion-Focused Coping. The results show that negative emotions do have a negative relationship with job satisfaction, across all levels of arousal. Low and high arousal emotions seem to be predictive of using Problem-Focused Coping strategies, whereas medium arousal does not show significant relationships with neither Problem nor Emotion-Focused Coping. Problem-focused Coping

and Emotion-Focused Coping do not show a significant relationship with job satisfaction.

Finally, the mediation relationships are non-significant. We find no support for our mediation model.

Theoretical Contribution

This paper tried to extend the existing research on the Affective Events Theory (Weiss & Cropanzano, 1996). Aligning with the AET (Weiss & Cropanzano, 1996) and Brown (2005) negative emotions directly influenced job satisfaction in the present study. Both high arousal, categorized by emotions like anger or anxiousness, and low arousal emotions, categorized by emotions such as a state of depression, had a similar negative effect on job satisfaction. We extended on the research by exploring the effect of medium arousal emotions on job satisfaction. Even though stress in medium levels has been shown to enhance work attitudes such as performance or motivation to overcome a problem (Holly & Butner, 1992; Shepherd et al., 2010), we found that medium arousal had the strongest relationship with job satisfaction. Medium arousal emotions have a negative effect on job satisfaction.

Previous research has focused on the links between coping and job satisfaction, or the direct link between negative emotions and job satisfaction. We tried to extend the research by adding coping between the link between negative emotions and job satisfaction.

Stanisławski (2019) previously linked low arousal emotions with the higher use of Problem-Focused Coping. We found a significant link, aligning with Stanisławski (2019). The link between low arousal emotions and Emotion-Focused Coping was non-significant so we conclude that when experiencing low arousal emotions such as boredom, depression, or gloominess one might choose Problem-Focused Coping over Emotion-Focused Coping. We wanted to find out what choice of coping strategy can be associated with medium arousal, yet we did not find a significant link with neither Emotion-Focused Coping nor Problem-Focused Coping. We cannot make an interference about it. Further, we found a significant link

between high arousal emotions and Problem-Focused Coping and a non-significant link between high arousal and Emotion-Focused Coping. This is contradicting with our initial hypothesis and Stanisławski (2019), linking high arousal emotions with the use of Emotion-Focused Coping strategies. We conclude that entrepreneurs might tend to use Problem-Focused Coping rather than overall Emotion-Focused Coping. Lazarus and Folkman (Biggs et al., 2017; Weiss & Cropanzano, 1996) argue that contextual factors are more likely to induce Problem-Focused Coping whereas person factors are more likely to induce Emotion-Focused Coping. This might explain why we did not find a relationship between any level of arousal and Emotion-Focused Coping. Since Problem-Focused Coping certainly is more solution-oriented, those findings are not entirely surprising. Owners and entrepreneurs have to find a solution to problems since the future of the venture, their career, and their employees depend on it.

When testing whether Emotion-Focused and Problem-Focused Coping have a significant effect on job satisfaction, we found non-significant results for both links. This is contradicting to Welbourne (2007) who stated that Problem-Focused Coping is associated with higher job satisfaction. We find no support for our initial hypothesis that Problem-Focused Coping and Emotion-Focused Coping have a positive effect on job satisfaction. We are not successful in extending the literature on coping and its effect on job satisfaction.

Further, we proposed a mediation model of emotions, coping, and job satisfaction. We found that the model is non-significant. We have no support for the assumption that the negative effect of negative emotions on job satisfaction is mediated by the use of coping strategies.

Practical Implications

This study has practical implications that could be of interest to entrepreneurs and health care professionals. We showed that negative emotions are very prevalent in the

entrepreneurial context and we showed that the level of stress early-stage entrepreneurs experience is high. Job satisfaction plays a crucial role in the workspace, for mental and physical health and to prevent job burnout or similar work-related illnesses. Since most research focused on the job satisfaction and coping mechanisms of employees, this research was trying to shine a light on the importance of entrepreneur's health, since it is detrimental to the future of the venture and employees. Understanding how job satisfaction is influenced could help to find ways of dealing with negative emotions.

Limitations

This research has several limitations. First of all, we used a convenience sample that consisted mostly of the direct or indirect social circle of the people who collected the sample. This is not entirely optimal. Further, 68 people indicated they did not experience negative emotions, decreasing the sample size significantly. Some effects were barely non-significant so increasing the sample size could have had an effect on the results. Therefore, there could be a lack of power present. Additionally, the sample mostly consisted of entrepreneurs from India, The Netherlands, and Germany. Since our countries of interest were only The Netherlands and India, we do not have enough data points to make an interference of culture differences.

Our sample was based on a self-reported questionnaire in which participants had to retrospectively report how they felt and what they experienced. This is also heavily influenced by the accuracy of the recall or threatened by recall bias (Blome & Augustin, 2015). We do not know how accurate participants are or were when reporting past events. Additionally, demand characteristics or social desirability could have influenced the way participants answered the questionnaire as well.

Further, the reliability of Emotion-Focused Coping and medium arousal was high enough, but it would have been better to have all reliabilities above 0.7 (Tavakol & Dennick,

2011). Using different items or adding more for medium arousal and Emotion-Focused Coping could increase the reliability. Researching the effect of coping strategies on job satisfaction might be better studied using a longitudinal design: asking the entrepreneurs in a follow-up survey whether using a certain coping strategy proved successful and affected job satisfaction could be of interest and give insight into the effectivity of coping strategies. Our research mostly focused on early-stage entrepreneurs and not on entrepreneurs who have been having their business for longer. It might be interesting to study if similar or different findings could be found in entrepreneurs with more experience. Due to the cross-sectional study design, no causal claims can be made.

Future Research

Future research should investigate the link between coping strategies and job satisfaction more since job satisfaction is important for the future of the venture and mental and physical health of the entrepreneur. Further, future research could test the effect of coping strategies on job satisfaction in a longitudinal study design, since the effectivity of certain coping strategies or how successful they are to maintain job satisfaction could become clearer. Since self-report questionnaires do bring some validity threats, a quasi-experimental design could be used in the future as well to be able to work towards making causal claims. Future research should also not rely on a convenience sample and increase the sample size, to counteract the power problem. More research focusing on medium arousal emotions could also be interesting since the literature is missing research on medium arousal emotions. We added gender only as a control variable, gender differences in job satisfaction, negative emotions and coping could also be worth researching.

References

- Ashkanasy, N. M., & Daus, C. S. (1993). *Emotion in the Workplace: The New Challenge for Managers* (Vol. 16, Issue 1). <https://about.jstor.org/terms>
- Aydin, A., Uysal, S., & Sarier, Y. (2012). The Effect of Gender on Job Satisfaction of Teachers: A Meta-Analysis Study. *Procedia - Social and Behavioral Sciences*, 46, 356–362. <https://doi.org/10.1016/j.sbspro.2012.05.122>
- Ben-Zur, H. (2009). Coping Styles and Affect. *International Journal of Stress Management*, 16(2), 87–101. <https://doi.org/10.1037/a0015731>
- Biggs, A., Brough, P., & Drummond, S. (2017). *Lazarus and Folkman's Psychological Stress and Coping Theory*.
- Blome, C., & Augustin, M. (2015). Measuring change in quality of life: Bias in prospective and retrospective evaluation. *Value in Health*, 18(1), 110–115. <https://doi.org/10.1016/j.jval.2014.10.007>
- Brown, S. P., Westbrook, R. A., & Challagalla, G. (2005). Good cope, bad cope: Adaptive and maladaptive coping strategies following a critical negative work event. In *Journal of Applied Psychology* (Vol. 90, Issue 4, pp. 792–798). <https://doi.org/10.1037/0021-9010.90.4.792>
- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the brief COPE. *International Journal of Behavioral Medicine*, 4(1), 92–100. https://doi.org/10.1207/s15327558ijbm0401_6
- Diefendorff, J. M., Richard, E. M., & Yang, J. (2008). Linking emotion regulation strategies to affective events and negative emotions at work. *Journal of Vocational Behavior*, 73(3), 498–508. <https://doi.org/10.1016/j.jvb.2008.09.006>

- Faragher, E. B., Cass, M., & Cooper, C. L. (2005). The relationship between job satisfaction and health: A meta-analysis. *Occupational and Environmental Medicine*, 62(2), 105–112. <https://doi.org/10.1136/oem.2002.006734>
- Fernet, C., Torrès, O., Austin, S., & St-Pierre, J. (2016). The psychological costs of owning and managing an SME: Linking job stressors, occupational loneliness, entrepreneurial orientation, and burnout. *Burnout Research*, 3(2), 45–53. <https://doi.org/10.1016/j.burn.2016.03.002>
- Folkman, S., & Lazarus, R. S. (1988). Coping as a Mediator of Emotion. In *Journal of Personality and Social Psychology** (Vol. 54, Issue 1).
- Forgas, J. P., & George, J. M. (2001). Affective influences on judgments and behavior in organizations: An information processing perspective. *Organizational Behavior and Human Decision Processes*, 86(1), 3–34. <https://doi.org/10.1006/obhd.2001.2971>
- George, D., & Paul Mallery, with. (2010). *SPSS for Windows Step by Step A Simple Guide and Reference Fourth Edition (11.0 update) Answers to Selected Exercises*.
- Griffith, J., Steptoe, A., & Cropley, M. (1999). An investigation of coping strategies associated with job stress in teachers. In *British Journal of Educational Psychology* (Vol. 69).
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Saddle River Boston Columbus San Francisco New York Indianapolis London Toronto Sydney Singapore Tokyo Montreal Dubai Madrid Hong Kong Mexico City Munich Paris Amsterdam Cape Town, U. (2010). *MULTIVARIATE DATA ANALYSIS A Global Perspective*.
- Holly, E., & Buttner, B. (1992). Entrepreneurial Stress: Is It Hazardous To Your Health? In *Journal of Managerial Issues* (Vol. 4, Issue 2). <http://www2.pittstate.edu/econ/jmi.html>

- Jordan, R. (2014, September 15). What Are The Real Small Business Survival Rates?
<https://www.linkedin.com/pulse/20140915223641-170128193-What-Are-the-Real-Small-Business-Survival-Rates>.
- Judge, T. A., Cable, D. M., Boudreau, J. W., & Bretz, R. D. (1994). *AN EMPIRICAL INVESTIGATION OF THE PREDICTORS OF EXECUTIVE CAREER SUCCESS*.
<http://digitalcommons.ilr.cornell.edu/cahrswp>
- Kelly, M. M., Tyrka, A. R., Price, L. H., & Carpenter, L. L. (2008). Sex differences in the use of coping strategies: Predictors of anxiety and depressive symptoms. *Depression and Anxiety*, 25(10), 839–846. <https://doi.org/10.1002/da.20341>
- Kemper, T. D., & Lazarus, R. S. (1992). Emotion and Adaptation. *Contemporary Sociology*, 21(4), 522. <https://doi.org/10.2307/2075902>
- Krohne, H. W. (2002). *Stress and Coping Theories*.
- Lauto, G., Pittino, D., & Visintin, F. (2020). Satisfaction of entrepreneurs: A comparison between founders and family business successors. *Journal of Small Business Management*, 58(3), 474–510. <https://doi.org/10.1080/00472778.2019.1660937>
- Lechat, T., & Torrès, O. (2017). Stressors and satisfactors in entrepreneurial activity: an event-based, mixed methods study predicting small business owners' health. In *Int. J. Entrepreneurship and Small Business* (Issue Y). <http://www.observatoire-amarok.com>
- Litman, J. A. (2006). The COPE inventory: Dimensionality and relationships with approach- and avoidance-motives and positive and negative traits. *Personality and Individual Differences*, 41(2), 273–284. <https://doi.org/10.1016/j.paid.2005.11.032>
- Reizer, A., Brender-Ilan, Y., & Sheaffer, Z. (2019). Employee motivation, emotions, and performance: a longitudinal diary study. *Journal of Managerial Psychology*, 34(6), 415–428. <https://doi.org/10.1108/JMP-07-2018-0299>

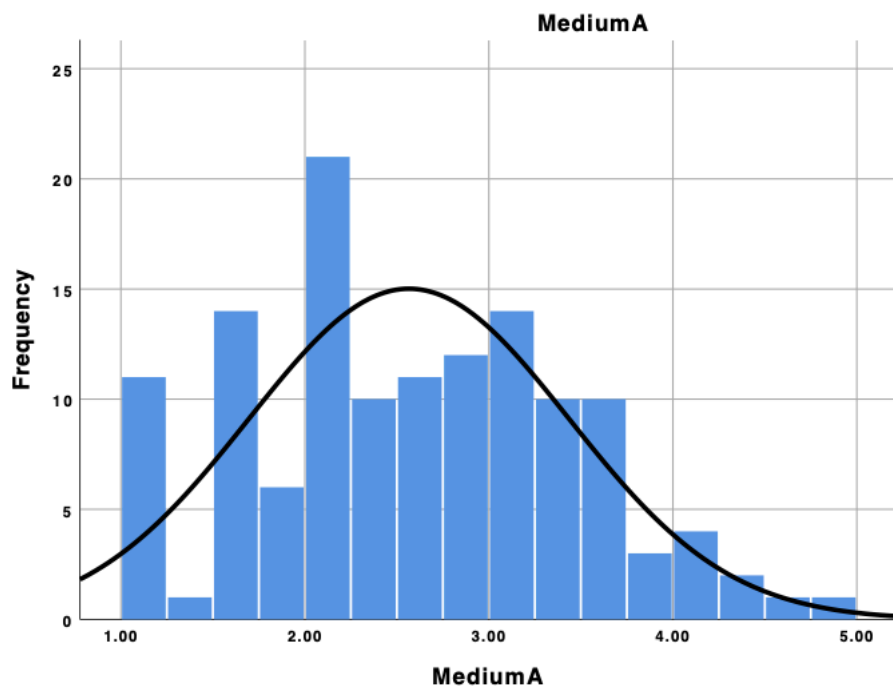
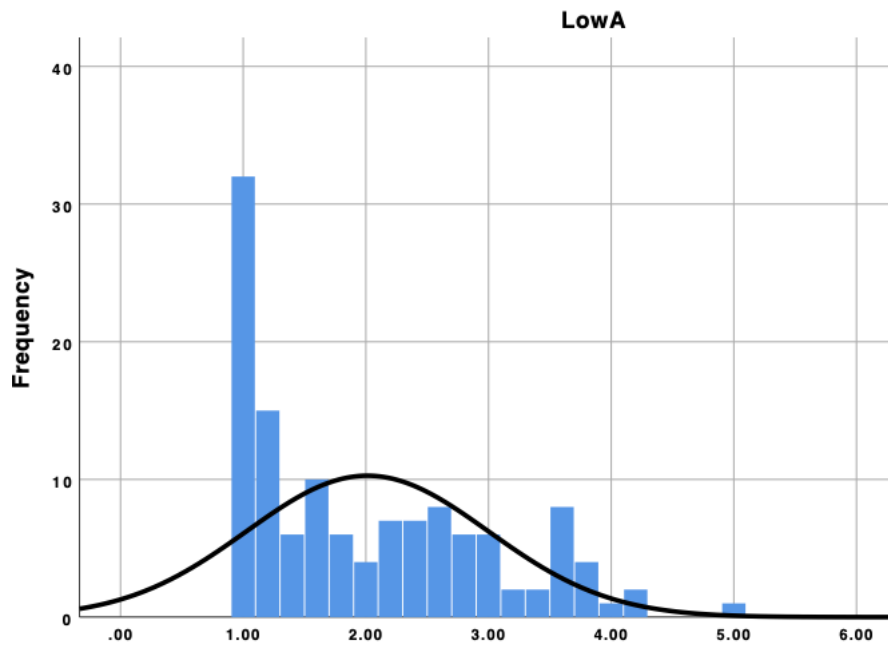
- Schindehutte, M., Morris, M., & Allen, J. (2006). Beyond achievement: Entrepreneurship as extreme experience. *Small Business Economics*, 27(4–5), 349–368.
<https://doi.org/10.1007/s11187-005-0643-6>
- Shepherd, C. D., Miles, M. P., Marchisio, G., Morrish, S. C., & Deacon, J. H. (2010). Entrepreneurial burnout: exploring antecedents, dimensions and outcomes. *Journal of Research in Marketing and Entrepreneurship*, 12(1), 71–79.
<https://doi.org/10.1108/14715201011060894>
- Stanisławski, K. (2019). The coping circumplex model: An integrative model of the structure of coping with stress. *Frontiers in Psychology*, 10(MAR).
<https://doi.org/10.3389/fpsyg.2019.00694>
- Statista Research Department. (2020). *Total number of small and medium enterprises (SMEs) in the Netherlands from 2016 to 2020*.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. In *International journal of medical education* (Vol. 2, pp. 53–55). <https://doi.org/10.5116/ijme.4dfb.8dfd>
- Thompson, N. A., van Gelderen, M., & Keppler, L. (2020). No Need to Worry? Anxiety and Coping in the Entrepreneurship Process. *Frontiers in Psychology*, 11.
<https://doi.org/10.3389/fpsyg.2020.00398>
- Toren, M. (2015, October 22). 6 Genuine Reasons Why People Become Entrepreneurs. <https://www.entrepreneur.com/article/251838>.
- van Katwyk, P. T., Fox, S., Spector, P. E., & Kelloway, E. K. (2000). Using the Job-Related Affective Well-Being Scale (JAWS) to investigate affective responses to work stressors. *Journal of Occupational Health Psychology*, 5(2), 219–230.
<https://doi.org/10.1037/1076-8998.5.2.219>

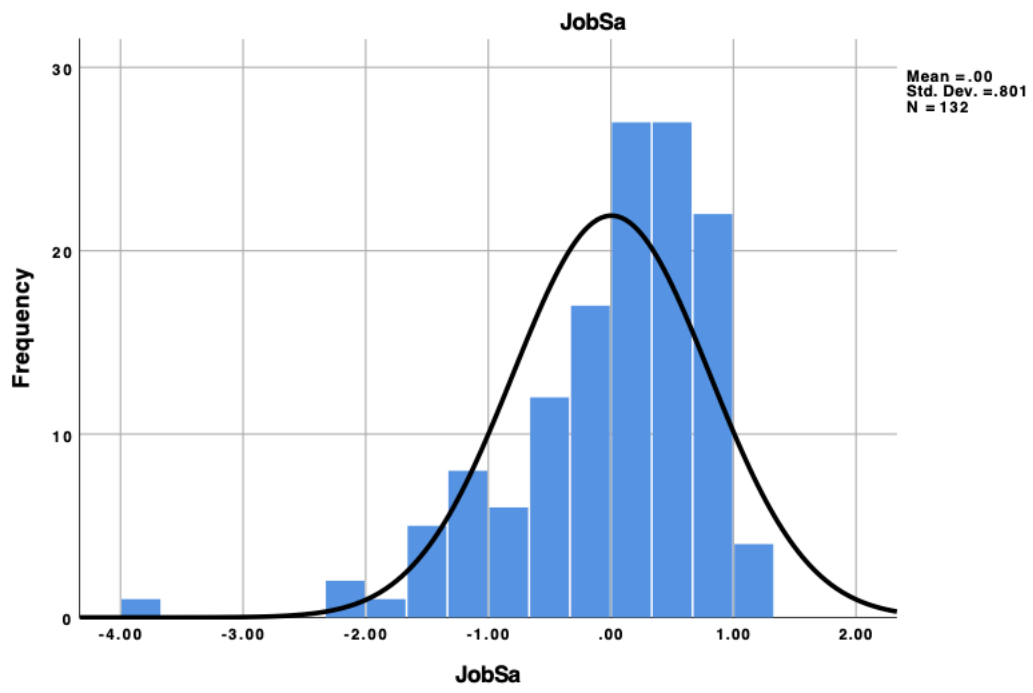
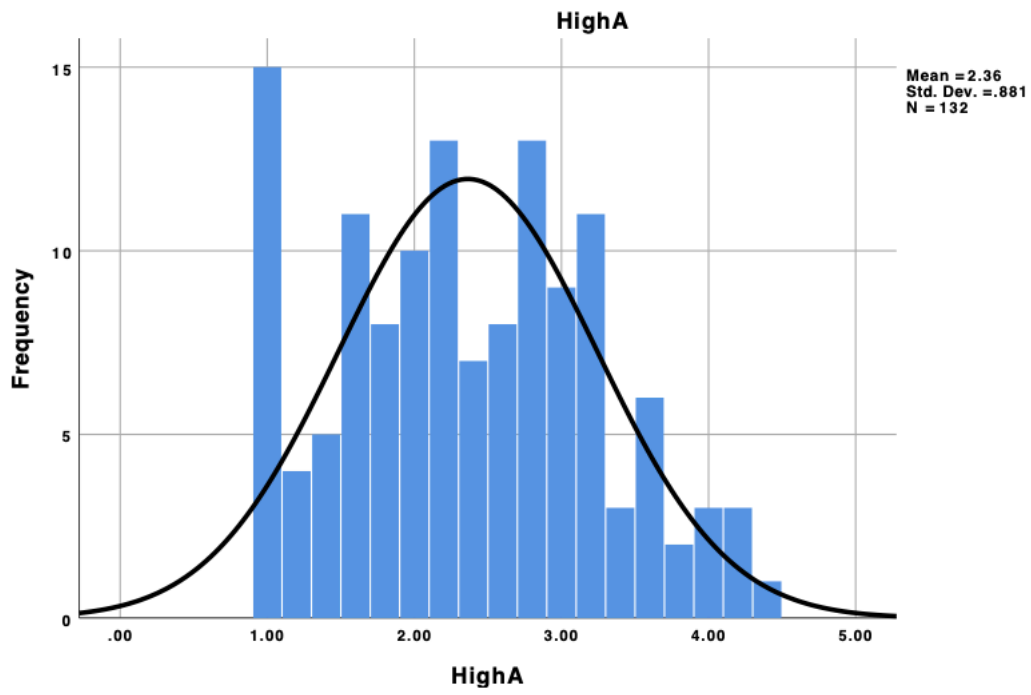
Weiss, H. M., & Cropanzano, R. (1996). Affective Events Theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. *Research in Organizational Behavior*, 18, 1–74.

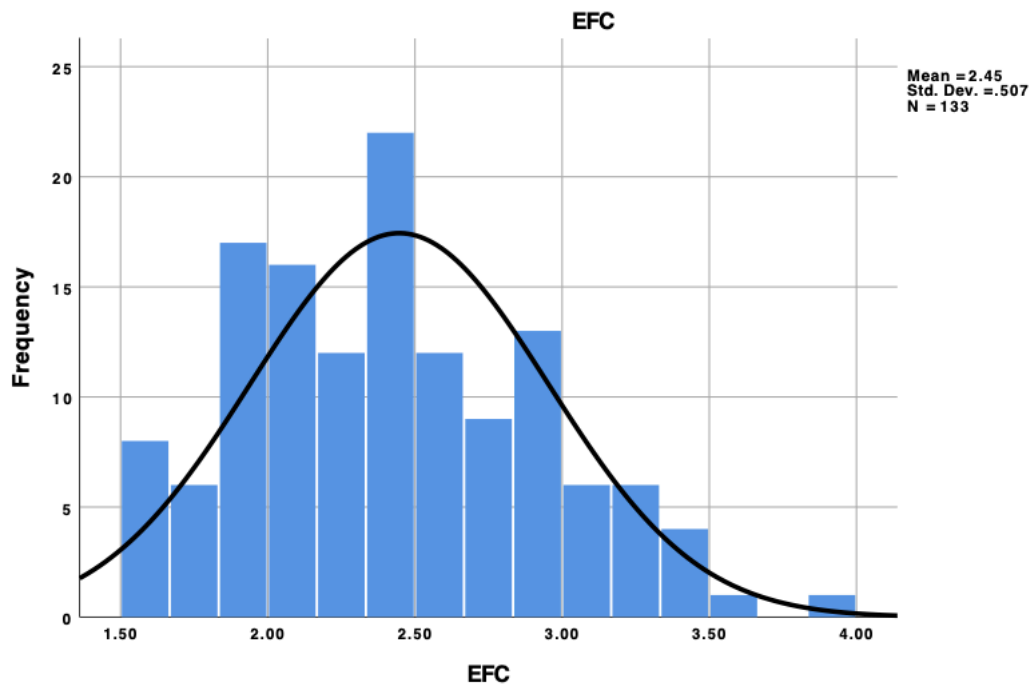
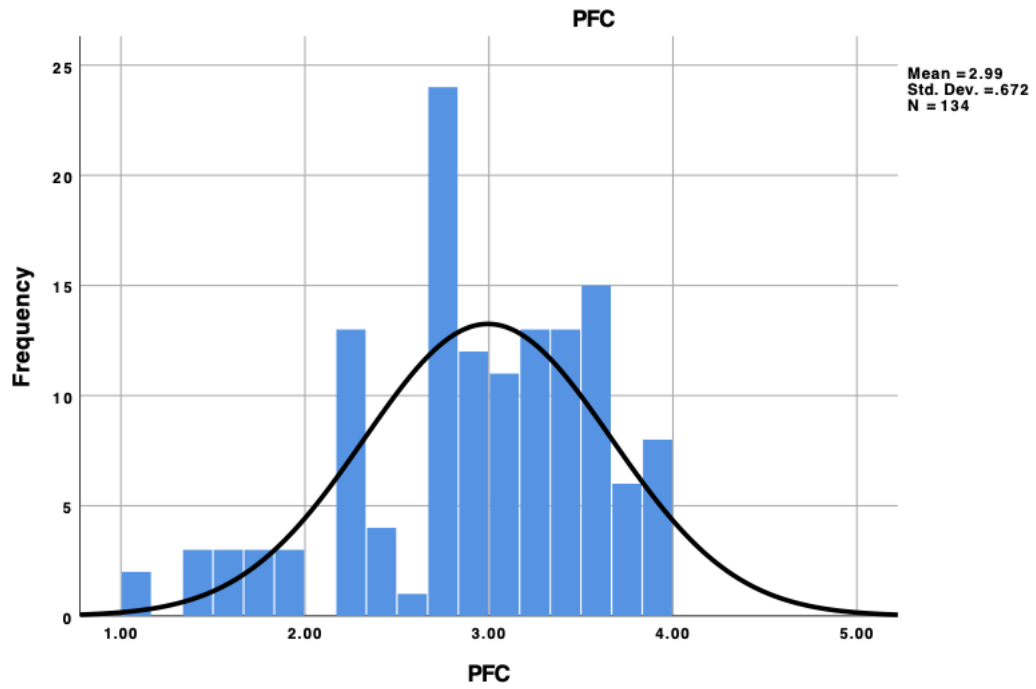
Welbourne, J. L., Eggerth, D., Hartley, T. A., Andrew, M. E., & Sanchez, F. (2007). Coping strategies in the workplace: Relationships with attributional style and job satisfaction. *Journal of Vocational Behavior*, 70(2), 312–325.

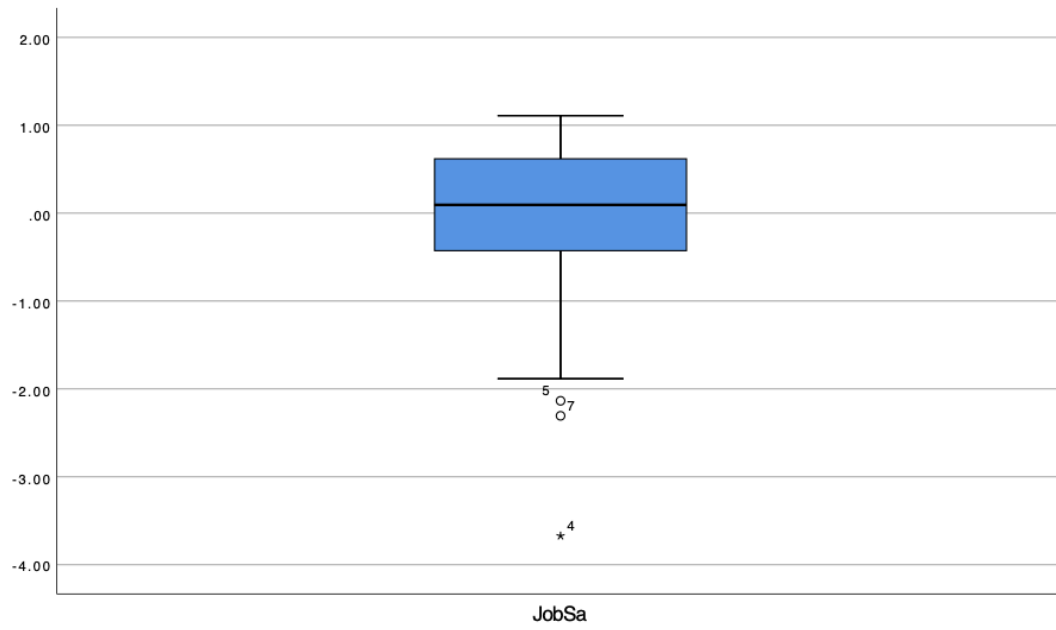
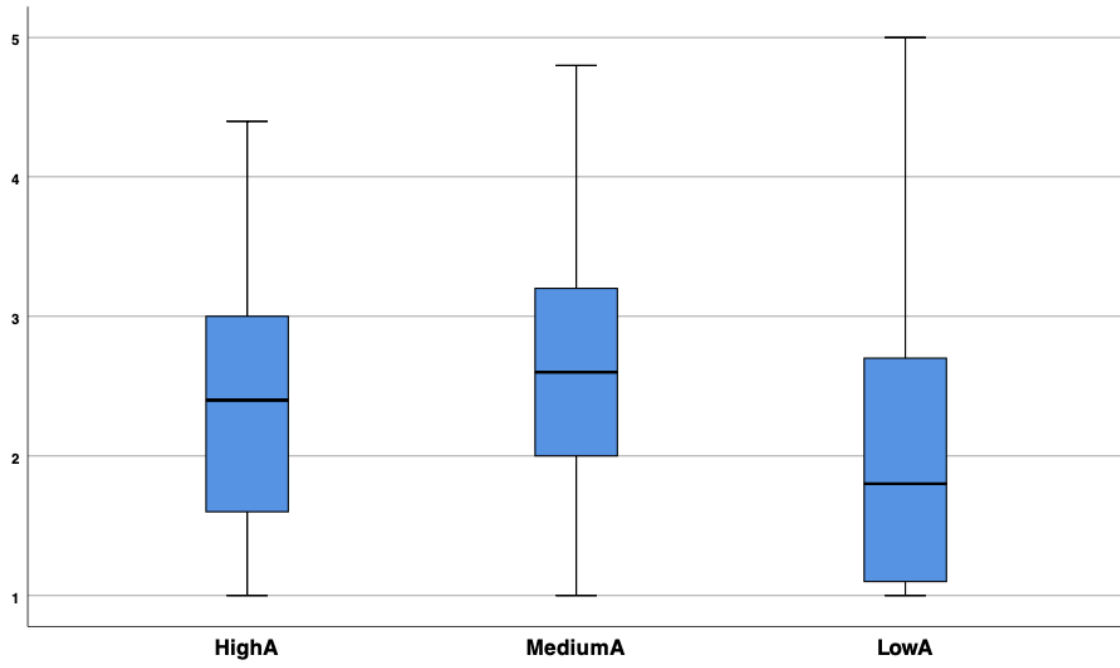
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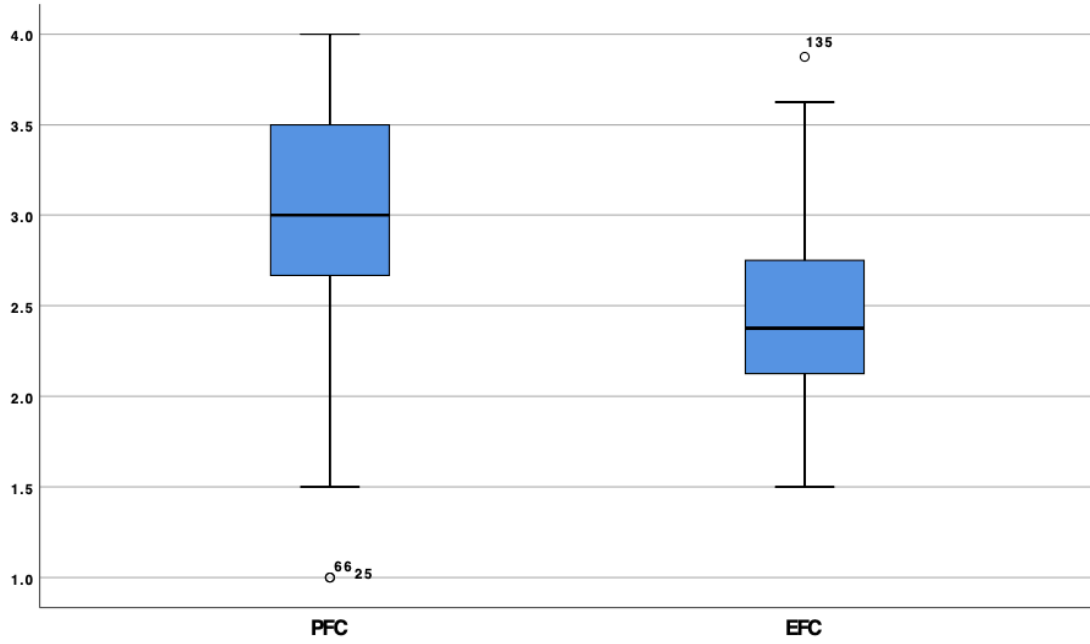
Appendix A



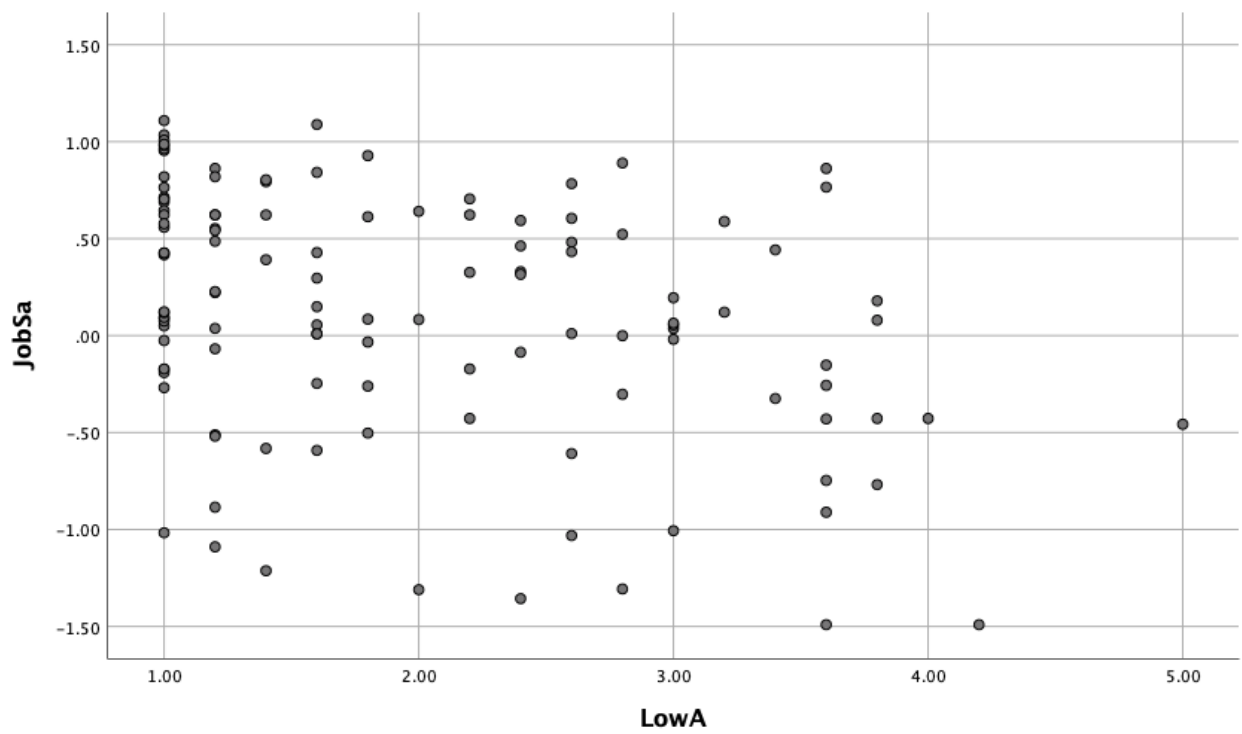


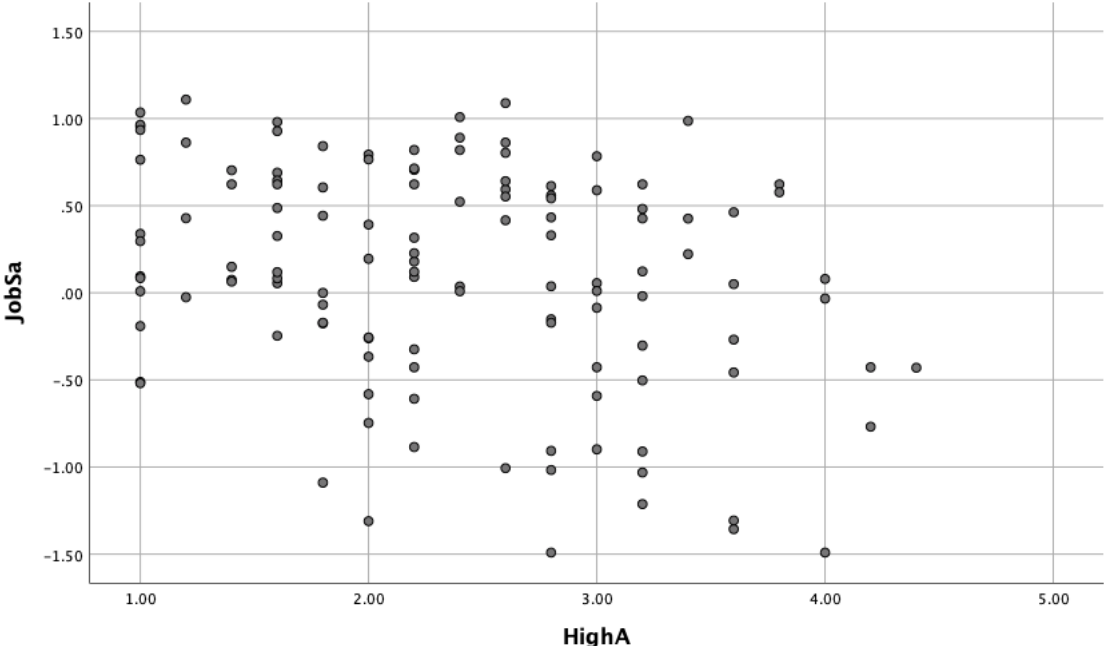
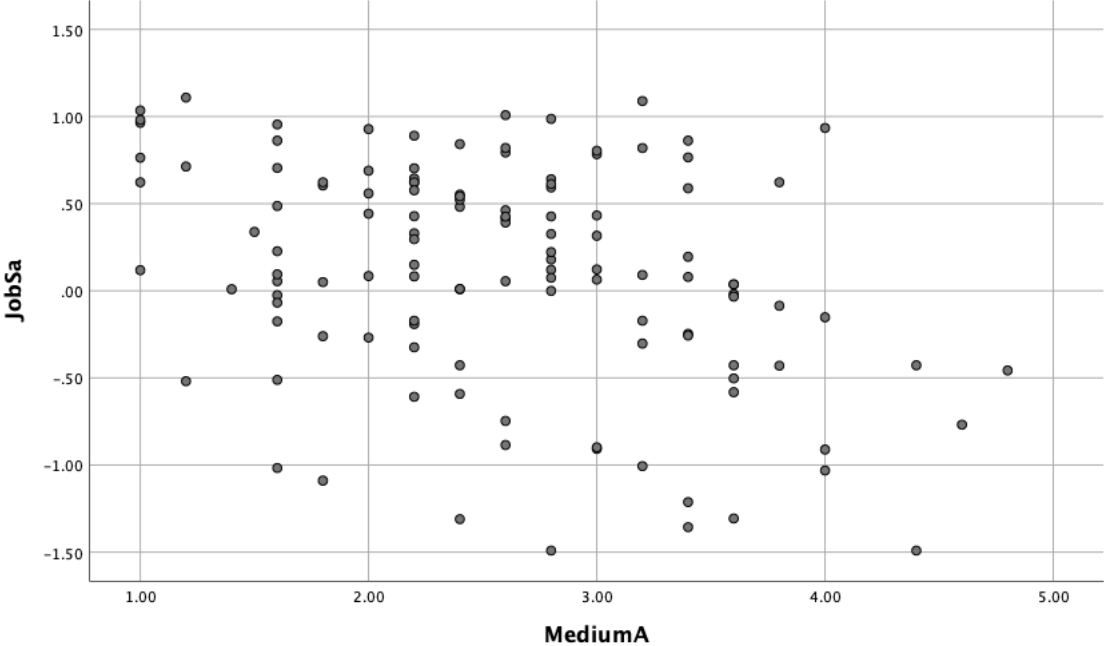


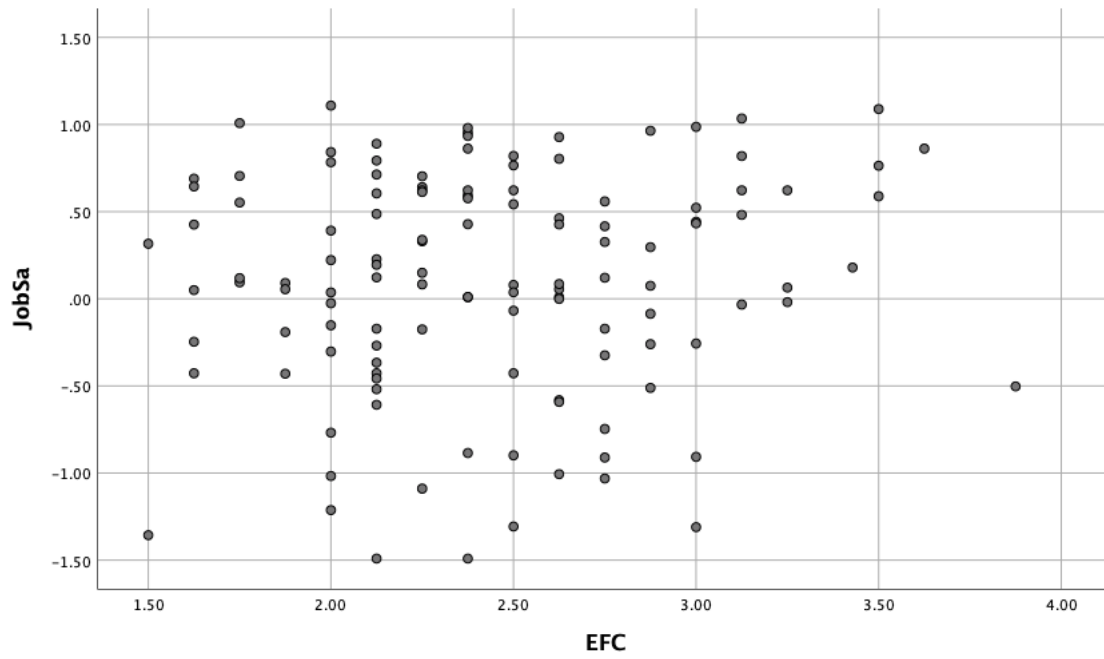
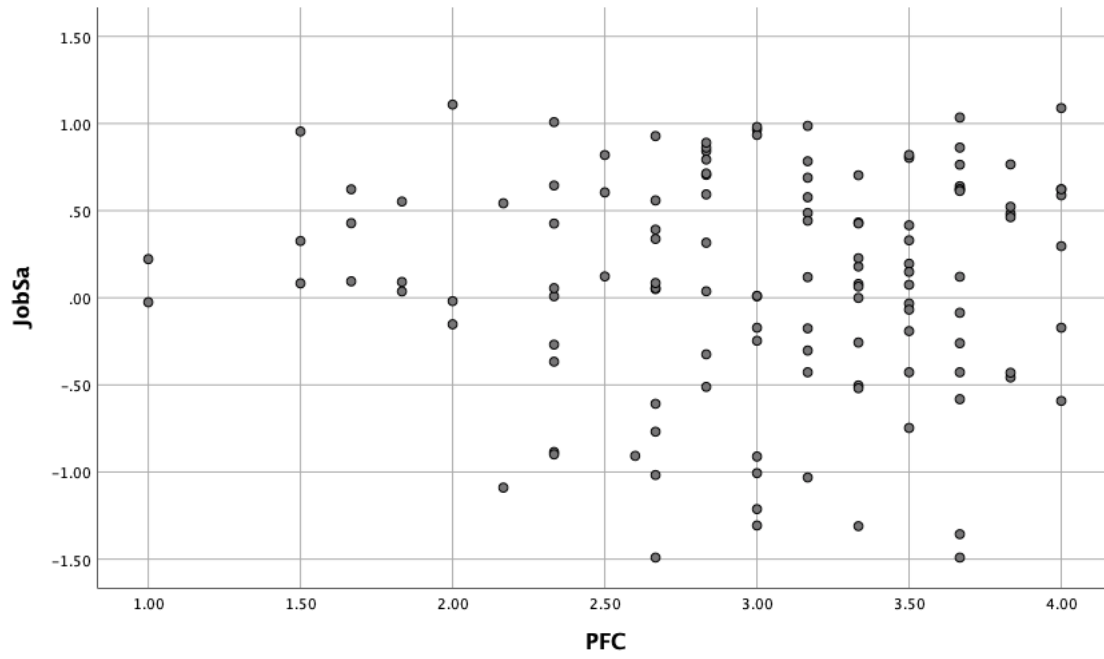




Regression







Appendix B

Control Variable Analysis

Table 3

Hypothesis 1				<u>95% CI</u>	
Considererd Path	Unstandardized Estimate	SE	<i>p</i>	Lower	Upper
High Arousal → Job Satisfaction	-.203	.062	.001	-.325	-.081
gender	-.239	.120	.049	-.477	-.001
founder	.314	.176	.076	-.034	.662

Considererd Path	Unstandardized Estimate	SE	<i>p</i>	Lower	Upper
Low Arousal → Job Satisfaction	-.210	.055	.000	-.319	-.101
gender	-.224	.120	.065	-.463	.014
founder	.201	.178	.261	-.151	.553

Reserach Question 1				<u>95% CI</u>	
Considererd Path	Unstandardized Estimate	SE	<i>p</i>	Lower	Upper
Medium Arousal → Job Satisfaction	-.245	.064	>.001	-.373	-.118
gender	-.234	.118	.065	-.475	-.004
founder	.204	.177	.261	-.170	.536

Direct Link				<u>95% CI</u>	
Negative Emotions → Job Satisfaction	Unstandardized Estimate	SE	<i>p</i>	Lower	Upper
Low Arousal	-.112	.069	.107	-.248	.024
Medium Arousal	-.158	.096	.104	-.349	.033
High Arousal	-.039	.080	.622	-.198	.119
gender	-.234	.119	.052	-.469	.002
founder	.136	.180	.451	-.220	.492

Reserach Question 2				<u>95% CI</u>	
Considered Path	Unstandardized Estimate	SE	<i>p</i>	Lower	Upper
Medium Arousal → PFC	.113	.074	.130	-.034	.259
gender	.128	.138	.355	-.145	.400
founder	.238	.206	.251	-.170	.646

Considered Path	Unstandardized			Lower	Upper
	Estimate	SE	<i>p</i>		
Medium Arousal → EFC	.009	.053	.861	-.095	.113
gender	-.107	.098	.275	-.301	.087
founder	-.020	.147	.894	-.310	.271

Hypothesis 2

Considered Path	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
Low Arousal → PFC	.165	.064	.011	.038	.292
gender	.089	.141	.530	-.190	.367
founder	.233	.208	.265	-.179	.645

Considered Path	Unstandardized			Lower	Upper
	Estimate	SE	<i>p</i>		
Low Arousal → EFC	.067	.046	.151	-.025	.158
gender	-.125	.101	.220	-.325	.075
founder	.043	.149	.776	-.253	.338

Hypothesis 3

Considered Path	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
High Arousal → EFC	-.036	.050	.467	-.135	.062
gender	-.102	.097	.296	-.295	.091
founder	-.035	.142	.808	-.317	.247

Considered Path	Unstandardized			Lower	Upper
	Estimate	SE	<i>p</i>		
High Arousal → PFC	.131	.070	.064	-.008	.270
gender	.113	.137	.411	-.158	.384
founder	.189	.200	.348	-.208	.585

Hypothesis 4

Considered Path	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
PFC → Job Satisfaction	-.021	.083	.803	-.185	.144
gender	-.273	.125	.031	-.521	-.025
founder	.359	.184	.053	-.005	.722

Hypothesis 5

Considered Path	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
EFC → Job Satisfaction	.148	.118	.210	-.085	.381
gender	-.260	.125	.039	-.507	-.013

founder	.360	.182	.050	-.001	.720
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Hypothesis 6

Considered Path	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
Low Arousal → PFC → Job Satisfaction					
Low Arousal	-.2150	.0566	.002	-.327	-.103
PFC	.0299	.0808	.7124	-.130	.190
gender	-.2270	.1209	.0630	-.467	.013
founder	.1941	.1795	.2819	-.162	.550

Hypothesis 7

Considered Path	Unstandardized			95% CI	
	Estimate	SE	<i>p</i>	Lower	Upper
High Arousal → EFC → Job Satisfaction					
High Arousal	-.1983	.0617	.0017	-.321	-.076
EFC	.1238	.1134	.277	-.101	.349
gender	-.2261	.1205	.063	-.0470	.013
founder	.3184	.1756	.072	-.029	.667
