

**The role of threat appraisal on coping in entrepreneurs: A transactional theory
approach**

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Abstract

According to the transactional theory of stress and coping, individuals appraise information from their environment and adapt coping strategies to reduce possible distress. When appraising an adverse work event as threatening nascent entrepreneurs are found to use more avoidance coping whereas entrepreneurs overall seem to take a certain motivation out of threats and adapt more approach coping. In the current research, we hypothesized that with increasing firm age entrepreneurs have higher stakes in and are more attached to their firm, so they would use more approach and less avoidance coping in face of a higher threat compared to entrepreneurs who just started out. We gathered data from 129 entrepreneurs using an online questionnaire about adverse work events, appraisal and coping responses and conducted a moderation analysis. Results show that higher threat appraisal is associated with more coping, but firm age did not moderate the relationship between threat appraisal and coping strategies. The results provide evidence for the transactional theory in the entrepreneurial context and back the question of what accounts for increased approach coping in entrepreneurs in face of high threat. Possible reasons for failing to find the moderation and directions for future research are discussed.

Keywords: transactional theory, threat appraisal, entrepreneurship, coping, firm age

The role of threat appraisal on coping in entrepreneurs: A transactional theory approach

According to the Global Entrepreneurship Monitor (not dated), entrepreneurship is “any attempt at new business or new venture creation [...] by an individual, a team of individuals, or an established business” (para. 2). Setting up a new business is a difficult process with many different challenges of different nature, i.e. legal, financial, and administrative. Entrepreneurship involves facing uncertainties, setbacks, and other difficulties on a constant basis (Van Gelderen, 2012). The success of the business depends on whether the entrepreneur can overcome obstacles and deal with them effectively. Failing to face challenges can lead to the collapse of the business, in turn, threatening the entrepreneur’s welfare and well-being (Jenkins et al., 2014). So, being an entrepreneur does give much freedom to pursue an own venture, but it comes with many risks and challenges.

According to the transactional theory of stress and coping (Lazarus & Folkman, 1987), individuals automatically evaluate stimuli in their environment and react upon them based on the emotional response they cause. Research on coping shows that in face of perceived threat individuals tend to adopt coping strategies such as avoidance and distraction from the stressor, rather than coping with the source of the threat. (Britton et al., 2019; Dias, Cruz & Fonesca, 2012; Doron & Martinent, 2016; Kerdijk et al., 2019). Avoiding a stressor and its emotional consequences is seen as maladaptive in coping literature, since it usually leads to negative outcomes for the individual (Kasi et al., 2012).

Entrepreneurs usually have the full responsibility for their firm. Therefore, ignoring problems especially while facing highly threatening situations could obstruct the success of the business. Rather, entrepreneurs must actively manage or solve upcoming problems. For example, entrepreneurs might adopt new business strategies or change their behaviour in order to overcome adversity presented by a stressor, acting directly, with the intention to solve

the problem. In fact, qualitative research on entrepreneurs shows that many of them benefit from feeling threatened or anxious, experiencing a higher motivation and drive which helps them work harder, sacrifice and engage even more in entrepreneurial activity (Hunter et al., 2021; Morgan & Sisak, 2015; Thompson et al., 2020). However, findings in research with entrepreneurs and their coping responses show contradictory results. For example, research on nascent entrepreneurs, so entrepreneurs who are in the process of setting up a business, shows a tendency to engage in avoidance behaviour and sometimes even completely withdraw from the entrepreneurial process when faced with the fear of failure and adverse work events, such as financial difficulties, personnel and client conflicts, legal issues etc. (Kollmann et al., 2017). Accordingly, especially in the early phase of business and business creation, it is common for entrepreneurs to give up on their idea and close down their business (Khan et al., 2014). Subsequently, our research question arises of how threat appraisal in early entrepreneurs is related to adoption of maladaptive coping strategies and how this relationship changes as a business grows older. In order to answer this question, we will apply the transactional theory to the entrepreneurial context, because it can give useful insights in how coping responses can be understood and what motivates them.

Exploring the relationship between threat appraisal and adoption of coping strategies with regard to firm age can provide important insights, beneficial to nascent and active entrepreneurs as well as for those investors and advisors who work with them.

Entrepreneurship in general is an increasingly important factor in contributing to innovation, productivity, and economic growth (Galindo & Méndez, 2014), so studying entrepreneurs can help design stress reducing interventions and promote behaviours beneficial for health and productivity. From a psychological perspective research on entrepreneurs gives unique insights into how individuals function in environments with many psychological and financial uncertainties (Baron et al., 2007). However, not much psychological research has been done

on entrepreneurship yet, especially coping research with regards to the transactional theory. Therefore, our research could provide a base for further applying and specialising the use of transactional theory in an entrepreneurial context. For example, based on our research model, the age of business could play a role in determining the coping response, since every entrepreneur has varying stakes when facing threats.

To sum up, the present research, took a closer look at how entrepreneurs cope with adverse work events (i.e. approach coping or avoidance coping) based on how much they perceive events as threatening to their, for example, personal growth, well-being, and general accomplishment. Furthermore, we hypothesized that firm age is highly correlated to the likelihood of adopting adaptive coping strategies, especially during events perceived as threatening.

Literature Review

Transactional theory of stress and coping

The transactional theory of stress and coping by Lazarus and Folkman (1987) explains the dynamic nature of a stimulus in the environment and its emotional and behavioural response. According to transactional theory, when faced with a stimulus, the individual goes through primary appraisal – determining the significance of the stimuli to their personal circumstances, well-being, and goals. The primary appraisal of the stimuli can be either as threatening, harmful, or challenging, influencing the emotional response of the individual to the stressor (Lazarus & Folkman, 1987). Secondary appraisal happens parallel to primary appraisal, in which the individual evaluates the options available to cope with the stressor, and to relieve the stress experienced as a result of it. Therefore, both coping efficacy (i.e. the belief as to the extent of which the individual can cope with the stressor) and situational variables (such as control in the job) are taken into consideration in determining the coping response (Lazarus & Folkman, 1987).

The present research focuses on primary appraisal as threatening since the events measured were unlikely to be perceived as challenging or harmful. The events were chosen as threatening to the entrepreneur's well-being, because not acting upon them could lead to failure of the business or forced entrepreneurial exit, endangering the entrepreneur's financial situation and self-worth (Jenkins et al., 2014, Ucbasaran et al., 2013). Furthermore, we investigated firm age as a moderator rather than situational control and coping efficacy, we hypothesized its influence on the coping strategy selection.

Approach and avoidance coping

Most literature on coping makes the distinction between two different ways of categorizing coping styles. The most common distinction is problem focused coping versus emotion focused coping. In problem focused coping the individual wants to change or eliminate the source of arousal, while in emotion focused coping the goal is to minimize or avoid the emotional consequence of the problem (Nes & Segerstrom, 2006). For example, someone using problem-focus coping is actively trying to resolve a problem causing distress while someone using emotion-focused coping could try to just ignore the problem and thus the emotional distress from it. The second distinction suggested, is made between approach and avoidance coping. In approach coping the individual uses engaged coping strategies to reduce, eliminate, or manage the stressor, while in avoidance coping the individual uses disengagement coping strategies such as ignoring, avoiding, or withdrawing from the problem altogether (Nes & Segerstrom, 2006). However, the categorization of coping styles is also criticized in literature, due to the multidimensional and multifunctional nature of any form of coping (Skinner et al., 2003). The research by Kasi et al. (2012) offers a further evaluation of coping strategies classifying them into two different styles: maladaptive and adaptive coping. Maladaptive coping can help the individual temporarily relieve the stress experienced as a result of a stressor, while not leading to the resolution of the stressor and even having negative

long-term outcomes such as increased anxiety (Dymond, 2019). On the other hand, adaptive coping helps the individual to overcome negative emotions by effectively dealing with and possibly resolving the stressor. Research on approach coping evaluates it as more adaptive than avoidance coping (Snyder and Pulvers, 2001).

In conclusion, this research is focused on the distinction between approach and avoidance coping in entrepreneurs when facing threatening situations. Although categorizing coping strategies can be inaccurate, in this case it is suitable for observing tendencies in adoption of coping strategies.

Coping strategy selection of entrepreneurs

Previous research about threat appraisal and its relationship with coping strategy selection has been conducted in the fields of sport and developmental psychology, specifically with children of divorced parents. Research conducted with athletes suggests that high threat appraisal is associated with avoidance coping and declined performance (Britton et al., 2019; Dias, Cruz & Fonesca, 2012; Doron & Martinent, 2016; Kerdijk et al., 2019). With children of divorced parents, threat appraisal was associated with both avoidance and approach coping. Lengua et al., (1999) suggest that this result is due to higher perceived threat, calling for more coping in general. Furthermore, Thompson et al. (2020) in a study about coping of entrepreneurs, found that avoidance and approach coping were used simultaneously in almost all situations that were perceived as threatening. Moreover, Thompson et al. (2020) also found that experiencing a certain level of anxiety had beneficial effects on the coping of entrepreneurs. Several participants in the study reported that “experiencing anxiety and feeling activated by it is the essence of being an entrepreneur” (p.6), highlighting the stressful nature of entrepreneurship but also the thrill and willingness to cope with it. Consistent with that finding, research by Hunter et al. (2021) shows that fear of failure and threat appraisal of

adverse work events motivated entrepreneurs to put in more coping efforts, provided they had self-efficacy and the situation was controllable.

In many cases, threat appraisal has been shown to be associated with anxiety and other negative emotions (Britton et al., 2019), which is in line with the transactional theory by Lazarus and Folkman (1987). According to the model, when a stressor gets identified as a threat via primary appraisal, negative emotions such as anxiety arise and then through secondary appraisal, the individual considers coping strategies, which in turn can trigger again the primary appraisal and emotional reaction, depending on the efficiency of the coping. Incorporating the previously mentioned research results, negative emotions caused by a stressor can motivate individuals in certain circumstances to work hard to achieve their goals or to dedicate more attention to them. In the case of adverse work events that are threatening to their accomplishments and well-being, entrepreneurs who aim to keep their businesses alive, would be obliged to adopt approach coping strategies. However, as shown above, higher distress from higher perceived threat is also associated with avoidance coping. Therefore, the first hypothesis of this research is as follows:

Hypothesis 1. Threat appraisal is positively associated both to (a) avoidance and (b) approach coping.

The role of firm age in coping strategy selection

As mentioned before, there are coping differences between nascent and active entrepreneurs. In contrast to the previously presented results, some literature (Kollmann et al., 2017) about the entrepreneurial exit of nascent entrepreneurs that are unable to cope effectively with fear of failure, due to obstacles or events being perceived as particularly threatening. In the research by Kollmann et al. (2017), the findings suggest that especially nascent entrepreneurs often engage in avoidance behaviours as a reaction to stressors and therefore, in some cases end up even withdrawing from the business opportunity entirely.

According to data from the United States Census Bureau (2006), only half of the newly founded firms survive longer than four years. Furthermore, research shows that nascent entrepreneurs frequently stop pursuing their idea in the early phases of business creation and close down their business (Khan et al., 2014). However, research shows that the older the firm, the lower the likelihood of an entrepreneurial exit and business closure (Amaral et al., 2007; Mitchell, 1994). Possible explanations for these findings are that with time a firm grows more stable and establishes itself on the market, but also that the entrepreneur behind the business is more involved with their venture. DeTienne (2010) also emphasizes the important role of an own venture as it grows to become part of the entrepreneurs' self-identity, growing not only emotional attachment but also financial dependence on it. Accordingly, the longer a business exists, the higher the stakes of an entrepreneur in their business, financially and emotionally. These factors lead to the possibility that firm age acts as a moderator, increasing effective coping especially in highly threatening situations which endanger the entrepreneurs' emotional and financial investment in their business. Therefore, our second hypothesis is:

Hypothesis 2. Firm age moderates the association between threat appraisal and adaptive and maladaptive coping. Specifically, the older the firm, the stronger the association between threat appraisal and approach coping and the weaker will be the association between threat appraisal and avoidance coping.

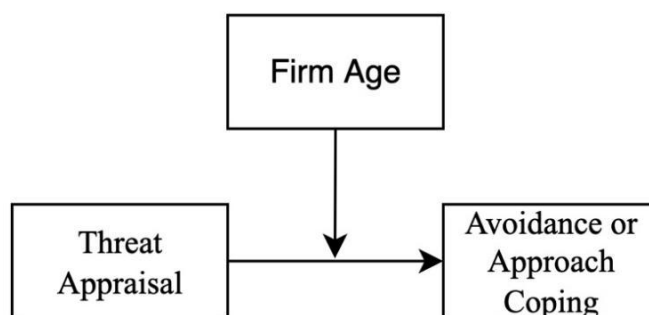


Figure 1: The research model

Method

Sample and Procedure

We chose a cross-sectional research design and conducted an observational online field study in the form of a questionnaire that we sent out to entrepreneurs. More specifically, we were looking for entrepreneurs as defined by the Global Entrepreneurship Research Association (not dated), the individuals that had a business not older than 3.5 years and have been involved in the founding of the business. Participants were recruited through convenience sampling and outreach to incubation centres. Additionally, entrepreneurs who participated in an on-site training course about entrepreneurship at the university of Kashipur, India, were approached by one of the project collaborators and asked to participate in the research.

Overall, 204 participants took part in the questionnaire of which 68 had to be excluded because they did not experience a negative work event and another 7 because of missing or incomplete data, resulting in a total sample size of 129. The sample consisted of 36 females, 97 males and 1 non-binary and over 64% had a university degree. The mean age was 31.5 years with a standard deviation of 11.23 and ages ranging from 19 to 67. Regardless of the requirement for participation to have been involved in the founding of the business, 14 participants were not involved but instead of excluding them, we used it as a control variable.

In the questionnaire, the participants first answered questions about their demographics and characteristics of their business. Then they got asked to recall a negative work event and describe coping behaviour, perceived threat, work satisfaction and emotional well-being.

Measures

Coping behaviour

A total of 12 coping styles based on the Brief COPE inventory by Carver (1997) were assessed in the questionnaire by presenting a coping behaviour like for example “I’ve been learning to live with it.” with a 4-point Likert scale ranging from “Not at all” to “A lot”. The coping styles measured in the questionnaire can be seen in Table 1 where they are also divided into the previously proposed categories of approach and avoidance coping. Each coping style was assessed through two items, resulting in a total of 14 items for approach coping with a Cronbach’s alphas of .74 and 10 items for avoidance coping with a Cronbach’s alpha of .73.

Table 1

Approach and avoidance coping

Approach coping	Avoidance coping
Active coping	Self-distraction
Planning	Denial
Positive reframing	Venting
Acceptance	Behavioural disengagement
Humour	Self-blaming
Using emotional support	
Using instrumental support	

Threat appraisal

Threat appraisal was assessed through three items (e.g., “The event threatens my growth and well-being.”) on a 5-point Likert scale ranging from “Strongly disagree” to “Strongly agree”, indicating to what extent the participant feels threat through the previously recalled work event towards their well-being, growth, accomplishments, and goals.

Cronbach's alpha was .83.

Control Variables

To ensure the internal validity of the study we controlled for gender, age, and level of education, which were shown to have an influence on coping behaviour in previous studies (Hertel et al., 2015; Martin et al., 2001; Watson et al., 2011). Furthermore, we controlled for being the only owner and having been involved in the founding of the business, which are both characteristics that increase personal attachment and stakes in the business, therefore possibly also affecting coping style selection (Greenberg & Mollick, 2018; Miller & Simmons, 1992).

Data Analysis

The data was analysed using IBM SPSS Statistics 28 with the PROCESS v4 plugin by Hayes (2021). After inspecting the data and removing participants with missing data, composite scores for avoidance and approach coping and threat appraisal were created. Respectively one hierarchical regression for avoidance and approach coping with control variables added in the first step was performed to rule out any confounding variables. In the next step, threat appraisal was added as the main effect to test the first hypothesis. After testing for multicollinearity between the independent variables threat appraisal and time passed since business foundation (from now on referred to as ‘days since foundation’) a moderation analysis was performed for avoidance and approach coping respectively.

Results

Descriptive statistics and Pearson correlations are reported in Table 2. The assumptions for normality, linearity, homogeneity, and homoscedasticity were all met sufficiently for our analyses as can be seen in the figures in the Appendix A.

Table 2

Means, standard deviations, and correlations among model variables

	<i>M</i>	<i>SD</i>	1	2	3	4
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1. Threat	2.81	1.22	—		
2. Avoidance coping	1.72	0.45	.35*	—	
3. Approach coping	2.73	0.45	.24*	.24*	—
4. Firm age (in days)	701.11	1231	-.04	-.01	-.04

Note: N = 129, *correlation is significant at $p < 0.01$

Hypothesis Tests

Hypothesis 1 predicted that threat appraisal would be positively associated with (a) approach and (b) avoidance coping. The hierarchical regression showed that the level of threat appraisal had an effect on approach coping which was significant ($\beta = 0.26$), $t(128) = 2.92$, $p < .01$, therefore confirming hypothesis 1(a) that threat appraisal has a positive effect on approach coping. A significant effect of threat appraisal on avoidance coping could also be found with an effect size of ($\beta = 0.33$), $t(128) = 4.18$, $p < .01$. These results indicate that consistent with hypothesis 1(b), threat appraisal also has a positive effect on avoidance coping.

The moderation analysis for approach and avoidance coping was performed after centering the independent variables threat appraisal and firm age. Furthermore, testing for multicollinearity showed that our two predictors were not correlated ($r = -.04$, $p = .66.$), so the assumption of collinearity was not a concern.

A significant regression equation for the moderation on our first dependent variable approach coping was found ($F(3,125) = 3.78$, $p = .012$), with a R^2 of .08. We found a significant main effect of threat on approach coping ($b = 0.09$, $t(125) = 2.72$, $p < .01$), but no main effect of firm age and also no interaction effect. The regression equation for the DV avoidance coping is significant as well ($F(3,125) = 5.80$, $p < .01$), with a R^2 of .12. There was also a main effect of threat on avoidance coping ($b = 0.13$, $t(125) = 4.15$, $p < .01$), but again no effect for firm age or the interaction of threat and firm age. The results of the moderation analysis can be found in Table 3 and Table 4 below.

Table 3

	<i>b</i>	<i>t</i>	<i>p</i>
Intercept	2.72	70.19	<.001
Threat	0.09	2.72	.007
Firm age	0.00	-0.67	.868
Interaction	0.00	-1.82	.071

Note: Approach coping as IV

Table 4

	<i>b</i>	<i>t</i>	<i>p</i>
Intercept	1.72	45.33	<.001
Threat	0.13	4.15	<.001
Firm age	0.00	0.03	.976
Interaction	0.00	-0.19	.849

Note: Avoidance coping as IV

Therefore, the data is not providing evidence for hypothesis 2 which predicted firm age would have a moderating effect on the relationship between threat and avoidance and approach coping. The interaction effect, even though not significant, can be seen in Figures 1 and 2 for both moderation models.

Exploratory Results

Based on Cook's distance we identified 13 outliers but decided to not exclude any further data points for the main analyses since plotting of the data showed no big violations. Removing the outliers had no change in significance on the results.

Furthermore, our data involved 33 entrepreneurs who indicated a future founding date or the date of filling in the survey. Since in other research nascent entrepreneurs showed to be coping differently than entrepreneurs who were already in business (Khan et al., 2014; Kollmann et al., 2017), we investigated if we could find a moderating influence on coping strategy selection based on whether the business was founded or not yet. However, the

analyses did not show any significant effects. A bigger sample of nascent entrepreneurs would be required to test the hypothesis more accurately.

Moreover, since as mentioned earlier the binary categorization of coping styles is not necessarily accurate to assess the actual ways of how entrepreneurs deal with obstacles and distress (Skinner et al., 2003), we also ran the analysis with every assessed coping style individually. However, we also did not find a significant moderation effect of firm age here.

Moreover, since as mentioned earlier the binary categorization of coping styles can be criticised to assess the actual ways of how entrepreneurs deal with obstacles and distress (Skinner et al., 2003), we also ran the analysis with every assessed coping style individually. However, we also did not find a significant moderation effect of firm age here.

Discussion

Drawing on the transactional theory of stress and coping by Lazarus and Folkman (1987), this paper explores the relationship between threat appraisal of adverse work events and the coping response of entrepreneurs in terms of approach and avoidance coping. Furthermore, firm age was investigated as a moderator for the relationship mentioned above. The results indicate that higher threat appraisal of an event is related to both higher avoidance and higher approach coping in entrepreneurs, supporting our first hypothesis. However, the data did not provide support for our second hypothesis, as there was no significant interaction effect between threat appraisal and firm age on the coping behaviour of the entrepreneurs.

The latter results should be investigated more carefully since they are contradictory to our expectations based on the proposed research model, namely, firm age was not found to have a moderating effect on the relationship between threat appraisal and coping. Possible reasons for this unexpected outcome are given in the following paragraphs.

First, the assumption that with increasing age of the firm the attachment of the entrepreneur to the firm and their stakes in the firm are increasing (DeTienne, 2010) could be

false. Subsequently, the conjecture that entrepreneurs with older firms would be using more adaptive coping strategies would also be inaccurate. Higher stakes and more attachment would not necessarily mean better coping in that case.

Second, entrepreneurs face problems that can be quite complex, and require different coping reactions. Especially considering that coping strategies need to match the demands of the situation (Lazarus, 2007; Lee-Bagley et al., 2005). Furthermore, different people vary in their ability to select the right coping strategy for the situation, some also have preferences for certain coping strategies and are skilled in certain coping styles (Cheng et al., 2014). Moreover, it is important to note that in many cases what comes most naturally to people is using several coping styles simultaneously. For example, an entrepreneur might use planning (i.e. approach coping) to work out the solution to a problem that is causing distress and therefore, will reduce the future by solving the problem. At the same time, they could engage in venting (i.e. avoidance coping) to express their frustration about the problem to their colleague, which reduces stress in the short term but does not contribute to solving the problem (Ben-Zur, 2009; LeBlanc et al. 2008). Avoidance coping means reducing stress in the short term but still having the stress in the long term because the problem causing distress remains in most cases. Whereas approach coping increases stress in the short term due to having to actively engage with the stressor, it eventually helps to resolve the problem for good and effectively decreases stress in the long term. However, for certain people avoidance coping has better outcomes for their well-being overall, as long as they do not avoid the stressor entirely but also deal with using some approach coping (Uy et al., 2013). In addition to that, although the entrepreneurs' stakes in the firm are higher, the efforts of using approach coping in terms of money, time, and energy might also be higher (Hunter et al., 2021). Finally, threat appraisal in entrepreneurial contexts might have a very dominant response for

all entrepreneurs, leaving no choice but to use avoidance and approach coping regardless of other circumstances, due to the severity of the situation.

Theoretical contributions

This paper has made some substantial contributions to the very limited body of knowledge regarding psychological aspects of entrepreneurial activity. The two main theoretical contributions are summarized in the next paragraphs.

First, the research covered in this paper provides evidence for an extension of the transactional theory by Lazarus and Folkman (1987) to the entrepreneurial context, which is characterised by many psychological stressors and uncertainties. Demands and environmental stressors interact with the appraisal and coping response of individuals, therefore, it is interesting to apply the transactional theory in the entrepreneurial context. Our study is consistent with other coping research on entrepreneurs (Thompson et al., 2020; Uy et al., 2013), showing higher threat appraisal being associated with both more avoidance and approach coping. This is in contrast to findings in other domains, such as sport, developmental and educational psychology where high threat appraisal is commonly associated with more avoidance coping and less approach coping (Britton et al., 2019; Dias, Cruz & Fonesca, 2012; Doron & Martinent, 2016; Kerdijk et al., 2019). Therefore, coping responses in other contexts compared to the coping of the entrepreneurs in our sample are more focused on the short-term and have fewer long-term benefits. Furthermore, we can see entrepreneurs in our sample coping more adaptively in terms of better projected long-term outcomes on psychological well-being and less adverse outcomes on an emotional and physiological level (Boyd et al., 2008; Graven et al., 2013).

However, the question arises now why the coping responses of entrepreneurs differ from the responses that are commonly adopted when situations are appraised as highly threatening. We proposed that being involved in a business financially and emotionally

(which was assumed to happen over time as the business grows) (DeTienne, 2010) has a moderating influence on the relationship between coping strategy selection and threat appraisal, however, we failed to establish this relationship.

The second theoretical contribution of our paper sheds light on the question of what variables the transactional theory needs to consider in its framework in order to explain entrepreneurs' coping responses in face of high threat. On the one hand, primary appraisal might play a role; Instead of appraising a situation/stressor just as threatening to their own well-being and goals (Lazarus & Folkman, 1987), entrepreneurs might also feel a certain sense of responsibility for their business and employees. These factors are not sufficiently represented in the transactional theory, however, since our research did not investigate them directly, we can only point out possible directions for future investigation. On the other hand, the adopted coping response might be related to feelings of desperation and the knowledge that avoidance coping styles will not contribute to solving the situation. This knowledge arises during secondary appraisal when individuals evaluate the options available to them to reduce distress (Lazarus & Folkman, 1987).

Practical implications

Our research also provides practical implications for nascent and active entrepreneurs, investors, coaches, and other involved parties. For example, from our zero effect for the hypothesis that firm age predicts better coping, we can learn that an entrepreneur that has been longer in business, doesn't necessarily use more effective coping strategies. Therefore, training aimed at use of more approach coping and less avoidance coping in threatening situations for entrepreneurs of all experience levels could support better long-term outcomes on psychological and physiological well-being (Boyd et al., 2008; Graven et al., 2013), and help with creating a more sustainable work environment.

Limitations and Future research

The current research has several limitations. First of all, the small sample size (N=129) and sample characteristics, being predominantly male could limit the generalizability of our study. Furthermore, the cross-sectional design of our research limits our conclusions since we cannot establish a causal link between the variables threat appraisal and approach or avoidance coping. Many factors that could be involved in the process were not measured directly. For example, individual information about how participants usually appraise situations as threatening and how they would cope with the resulting distress, which can be very different from person to person (Cheng et al., 2014). Longitudinal studies about trait threat appraisal and trait coping could explain more variance in the coping behaviours and help with tracking systematic changes in coping over time. Since our data collection was only aimed at entrepreneurs with firms not older than 3.5 years, it would be insightful to see if the relationship between threat appraisal and coping strategies would change if entrepreneurs with older businesses would be taken into account. Furthermore, according to the literature entrepreneurs also need the capability and resources to resolve an adverse situation using approach coping styles (Hunter et al., 2021). However, we did not control in our study for coping efficacy or situational control, so we can only assume that the problems entrepreneurs were facing in our sample did not exceed their abilities and resources to use approach coping. Including the aforementioned measures in future studies would enable having a more complete picture of the investigated situations and understand the coping responses better in the context of the transactional theory. Furthermore, future research could include direct measures for attachment and stakes in the firm and investigate if these factors have a moderating effect on the threat appraisal-coping relationship. These measures would allow to investigate our research question again without assuming attachment and stakes through firm age, which might have been false as mentioned earlier already. Another factor to be examined

could be perceived responsibility of entrepreneurs for their business and employees since it is part of primary appraisal according to transactional theory but was not paid attention to in the current research. Therefore, future research should aim to assess components of primary and secondary appraisal more precisely, which could help to specialize and understand the transactional theory in the context of entrepreneurship better. A qualitative approach to do so could be useful. Additionally, qualitative research with entrepreneurs could help to understand the complex nature of coping, and the ways entrepreneurs deal with threatening events better and leave more room for exploration, since every entrepreneur and their environment are different.

Moreover, Uy et al. (2013) found that entrepreneurs with prior entrepreneurial experience were more effective than new entrepreneurs in using both approach and avoidance coping. Therefore, taking prior entrepreneurial experience into account when investigating coping might provide a better understanding of the coping behaviour of entrepreneurs. In another research by Uy et al. (2013), experienced entrepreneurs were shown to have better outcomes for their personal well-being through avoidance coping than entrepreneurs with less experience. For this reason, an interesting correction for investigation could be entrepreneurial experience as a moderator for the effect of coping strategies on personal well-being in short- and long-term.

Conclusion

Despite these limitations, this research can be seen as a first step towards integrating transactional theory better into the entrepreneurial context. We found a null effect of firm age on the relationship between threat appraisal and approach and avoidance coping. However, this research points out and serves as a base for many further directions for research that would advance knowledge about coping in entrepreneurs and further develop the transactional theory in the entrepreneurial context.

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Appendix A

Tests for Assumptions

