

Improving Mental Well-Being and Productivity of Small-Medium Entrepreneurs in Fragile, Conflict and Violence Affected Areas

Can Cognitive Behavioral Therapy Trainings Help?

Priyam Saraf
Tasmia Rahman
Miguel Gallardo
Julian Jamison
Charles Lor



WORLD BANK GROUP

Finance, Competitiveness and Innovation Global Practice

&

Mind, Behavior, and Development

June 2018

Abstract

This literature review summarizes the link between psychological well-being and entrepreneurial outcomes for small and medium-size enterprises in fragile, conflict, and violence-affected contexts. It identifies potentially promising, scalable psychosocial training interventions, based on cognitive-behavioral therapy approaches, that can be adapted and implemented to improve psychological health at the individual level, that could lead to better business performance at the firm level.

The findings from the literature of cognitive psychology and small business economics suggest that small and medium-size enterprise entrepreneurs, without diversified capital, stable sources of income, or delegation opportunities, tend to suffer from more stress and anxiety compared with their peers in salaried jobs or in larger firms. Chronic stress is found to deplete their psychological resources, erode their motivating role within the firm, and result in counterproductive work behavior. The combination

of regular business-related entrepreneurial stressors with the uncertainties of a fragile, conflict, and violence-specific environment—natural disasters, conflict, migration, and/or exposure to trauma—can amplify poorer psychological outcomes and hamper business performance.

Utilization of cognitive-behavioral therapy approaches to mitigate stress and build psychological capital appears promising. Although such curricula have been tried and tested for other target groups at scale, such an intervention has not yet been applied for at-risk entrepreneurs. Given that small and medium-size enterprises are important drivers of income in fragile, conflict, and violence-affected contexts, future research might benefit from evaluating whether the effects of cognitive-behavioral therapy-based training interventions can be replicated for these new target groups and, importantly, whether the interventions can lead to better behavioral outcomes and business performance over time.

This paper is a product of the Finance, Competitiveness and Innovation Global Practice in collaboration with the Mind, Behavior, and Development Unit. It is part of a larger effort by the World Bank to provide open access to its research and make a contribution to development policy discussions around the world. Policy Research Working Papers are also posted on the Web at <http://www.worldbank.org/research>. The authors may be contacted at psaraf@worldbank.org.

The Policy Research Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about development issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. The papers carry the names of the authors and should be cited accordingly. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

Improving Mental Well-Being and Productivity of Small-Medium Entrepreneurs in Fragile, Conflict and Violence Affected Areas:

Can Cognitive Behavioral Therapy Trainings Help?¹

Priyam Saraf
Tasmia Rahman
Miguel Gallardo
Julian Jamison
Charles Lor

JEL: D8, D9, I31, J17, J24, L25, L26, O15

Keywords: entrepreneurship, productivity, fragility, conflict, violence, uncertainty, mental health, well-being, stress, cognitive behavioral therapy, psychological capital, human capital, human development, small medium enterprises, risk

¹ ACKNOWLEDGEMENTS: The authors are grateful to John Speakman, Tara Beteille, Andrew Myburgh and Patricio Marquez who provided excellent peer review comments that helped to improve the paper. Valuable inputs were received from Deeksha Kokas, Elvira Van Daele, Keiko Nagai, Kiran Afzal, Natalia Agapitova, Suhail Kassim, Victoria Levin and Vincent Palmade (in alphabetical order) at different stages. The authors are grateful to the Human Development Research Foundation team for helpful comments on the original draft. Prof. Catherine Panter-Brick from Yale University's Department of Anthropology provided valuable inputs during a seminar at the World Bank Group in January, 2018. The paper is funded by the joint WBG-IFC SME Launchpad Fund, the State and Peacebuilding Fund (SPF) and a research grant from the Development Economic Group (DEC), and was done in collaboration with the Mind, Behavior, and Development (eMBeD) Unit within the World Bank Group. The interpretations of the literature, and any errors associated with it, remain the authors' responsibility.

Corresponding author: Priyam Saraf, Economist, World Bank Group (psaraf@worldbank.org)

Table of Contents

Executive Summary.....	4
1. Objective of the Review	7
2. Prevalence of Stress and Its Effects among SME Entrepreneurs	10
2.1 Prevalence of Stress among SME Entrepreneurs.....	10
2.2 Effects of Stress on Individuals and Business Performance (and Pathways)	12
2.2.1 Pathway 1: Depletion of Psychological Resources.....	12
2.2.2 Pathway 2: Erosion of the Entrepreneurial Influencing and Motivating Role	13
2.2.3 Pathway 3: Counterproductive Work Behavior	13
2.3 Common Stressors	14
3. Strategies to (Re-)Build Psychological Capital for Stress Mitigation	19
4. Psychosocial Interventions (Based on CBT) to Grow Psychological Capital.....	23
4.1 Psychosocial Curricula.....	24
4.1.1 Cognitive Behavior Therapy (CBT)	24
4.1.2 Mindfulness-Based Cognitive Therapy (MBCT)	25
4.1.3 Rational Emotive Behavior Therapy (REBT)	26
4.1.4 Problem Management Plus (PM+).....	26
4.1.5 Other Trainings	28
4.2 Summary of Themes, Structure, Delivery, and Cost of Psychosocial Support Curricula	29
4.3. Contextual Adaptation of CBT-Based Psychosocial Support Curricula	31
5. Concluding Remarks.....	31
Bibliography	33
Annex 1: External Environment Stressors in KP/FATA in Pakistan	49

Figures, Boxes and Tables

Figure 1: The Problem-Solution Framework for the Review	8
Figure 2: Framework for Psychosocial Curricula Design: Psychological Capital or “HERO”	21
Box 1: Key Questions Guiding the Review	9
Box 2: Snapshots of the Environmental Stressors in Pakistan’s KP/FATA Region	18
Box 3: Key Themes in Designing Psychosocial Curricula for Entrepreneurs	28
Table 1: Overview of Stressors from the Entrepreneurship Literature	14
Table 2: Aggregate Costs of Conflict for Rural Households in Northern Uganda, 2004	17
Table 3: Comparison of Common Psycho-social Support Curricula (Theme, Structure, Cost)	29

Executive Summary

Small and Medium Enterprises (SMEs) play a pivotal role in the economy of many countries, particularly in developing economies. Indeed, in emerging economies, they contribute up to 60 percent of employment and up to 40 percent of gross domestic product (GDP). As such, there is a wide array of programs focused on improving the capacities of SMEs. These programs typically focus on improving skills, as well as in providing financial support for infrastructure and management with the objective of integrating SMEs into global markets. Nonetheless, these programs often overlook an important aspect that tends to influence firm performance: *the mental health status of entrepreneurs* who lead these companies and the attendant consequences on their business performance. Findings from the literature of small business economics and cognitive psychology suggest that SME entrepreneurs tend to suffer from high levels of stress. Literature on small business development in Fragile, Conflict and Violent (FCV) areas reveals that entrepreneurs face far more uncertainty and risk in such environments than in a typical developing country context — with the psychological price being even higher.

The first objective of this review is to collect and synthesize some of the evidence between stress and SME performance in FCV environments. The second objective is to identify promising, scalable psychosocial support interventions, based on cognitive-behavioral approaches, that can be adapted and implemented to improve the mental health status of SME entrepreneurs in such high stress environments.

The prevalence of chronic levels of stress and anxiety among entrepreneurs has been widely documented in the literature. This is particularly the case for SME entrepreneurs who possess less diversified physical, financial, psychological and intellectual resources, and whose only asset is the firm (Ang 1991). In addition, SMEs are often family-run businesses, and entrepreneurs often take on multiple responsibilities, working long hours, not disengaging from work and not delegating responsibilities. This results in continuous cognitive engagement and stress for the entrepreneurs managing these firms. Whereas low to moderate levels of stress can be a positive trigger for the performance of entrepreneurs, chronic stress could potentially be harmful for both well-being and performance in the long run. Chronic stress can deplete the psychological resources of entrepreneurs. Specifically, it can erode their influencing and motivating role, and result in counterproductive work behavior, thereby negatively impacting firm performance.

The factors, called stressors, that contribute to stress in entrepreneurs can be wide-ranging, including direct business activities, professional and personal relationships, career prospects, organizational roles, non-work factors, and the external environment (Cartwright and Cooper 1997; Quick and Quick 1984; and Schuler 1982). In FCV countries, the combination of the regular, business-driven entrepreneurial stressors with the FCV-specific external environment uncertainties — including factors such as natural disasters, conflict, migration, and/or exposure to trauma — can amplify poorer psychological outcomes and hamper business performance. In a rapid needs assessment study from the Khyber Pakhtunkhwa/Federally-Administered Tribal

Areas (KP/FATA) region of Pakistan, SME entrepreneurs described various adverse symptoms, such as *“agitated mood, disturbances in diet and sleep, nervousness, loss of interest and inability to concentrate on work”* due to conflict-related stressors.

One potential response to the high entrepreneurial stress levels observed in FCVs is greater investment in the development of the psychological capital of entrepreneurs to help them build resilience and mitigate stress. Psychological capital is a higher-order core concept that includes building self-efficacy, hope, optimism, and resilience characteristics. It is also positively associated with mindfulness² (Luthan, Youssef and Avolio 2009; Roche and others 2014). It can play a mediating role in stress mitigation by promoting positive psychological responses to stressful situations, lowering counterproductive work behavior(s), improving desirable attitudes and behaviors among leaders, and increasing employee trust levels, as well as perceived performance and self-efficacy³ (Avey and others 2010; Hmieleski and Carr 2007; Norman and others 2010; and Story and others 2013).

The fields of behavioral economics and cognitive psychology provide a range of psychosocial training curricula that can help build psychological capital and resilience among entrepreneurs. Psychosocial curricula based on cognitive-behavioral therapy approaches appear promising: examples include Cognitive Behavior Therapy (CBT), Mindfulness-based Cognitive Therapy (MBCT), Rational Emotive Behavior Therapy (REBT), and Problem Management+ (PM+). They focus on recognizing and countering negative thought patterns, emotions or actions either by cultivating acceptance; ameliorating their effects; or by modifying behavior in a positive way across target groups, including entrepreneurs. Personal Initiative Training is also explored as it is targeted toward the growing proactiveness among entrepreneurs, although not through the application of CBT, per se. These interventions vary with respect to the type of groups they target, the contexts where they have relevance, their reliance on local capacity for training-the-trainer activities, and finally, their costs.

Despite the availability of these curricula, a stock taking of impact evaluations indicates that most of these experiments have been tested in mental health settings. However, very few have been tested with the entrepreneur or adult breadwinner target populations. In mental health experimental work, these interventions have shown promising results with significant reduction in depression and anxiety (Kessler and others 2009; Ma and Teasdale 2004; Mataix and others 2015; Mohr and others 2005; Spector and others 2014; Piet and Hourgaard 2011; and Teasdale and others 2000). Though limited, evidence about the impact of psychological interventions in occupational contexts suggests that they could be effective in increasing profits (Campos and others 2017), reducing the number of sick days taken (Blonk and others 2006) and mitigating

² Mindfulness can be defined as a mental state achieved by focusing one's awareness on the present moment, while calmly acknowledging and accepting one's feelings, thoughts, and bodily sensations, used as a therapeutic technique (pieced from multiple sources).

³ Self-efficacy refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments (Bandura, 1977, 1986, 1997; American Psychological Association).

occupational stress (Ogbuanya and others 2017) — although some of them work with healthier populations, on average, than those at-risk.

Due to the significant role that SMEs play in employment generation and GDP growth in developing countries, it would be important to evaluate whether such CBT-based psychological interventions can be replicated in FCV contexts, and whether they can lead to better behavioral outcomes and improved business performance over time. For the case of SME entrepreneurs in FCV environments, the adaptation of such training curricula to build psychological capital and improve mental well-being seems to be a potential solution in the reduction of stress levels. As such, it should be explored further in the upgrading of FCV SME programming.

1. Objective of the Review

It is widely recognized that small and medium enterprises (SMEs) are a lifeline for job creation and economic growth in developing countries, including those affected by fragility, conflict and violence (FCV). For example, 60 percent of employment and 40 percent of gross domestic product (GDP) are attributable to SMEs in developing countries. It is no surprise then that public policy programs and donor resources in these countries are aimed at increasing the capacities of SMEs to achieve higher economic growth and job creation. These interventions typically include providing infrastructural and financial support, grants to build workforce technical and soft skills, and facilitating connections for SMEs to global markets to expand their product and customer reach. In a meta review of the impact of capacity building programs for businesses in developing countries, McKenzie and Woodruff (2014) find only a few studies that show any significant impact of these trainings on business profits and revenues. Of those that find a significant impact, the effects are relatively modest in the short run, and often disappear in the long run. The cost of implementing these trainings ranged from \$21 per firm to \$400 per firm.

What is studied less often in developing SME capacities is the relationship between the mental well-being of entrepreneurs who lead these SMEs and its impact on firm performance. Literature from the fields of small business economics and cognitive psychology points to unusually high levels of stress among these entrepreneurs, particularly in FCV contexts where they routinely work with significant levels of uncertainty and risk. They face a breadth and depth of problems on a daily basis, especially when compared to salaried employees. For example, they deal with high levels of stress and make cognitively costly decisions. Indeed, their choices can deplete working memory.⁴ Compared to large firms, SME owner-managers are much less diversified and more prone to depression, anxiety, and other health issues.⁵ However, little has been done to study the effects of stress on individual entrepreneurs, and through the entrepreneur, on the firm. Little literature exists in identifying what kinds of training curricula might increase the cognitive and adaptive abilities of entrepreneurs to more ably function in FCV contexts.

This review summarizes the evidence regarding links between stress and performance of entrepreneurs leading SMEs in high risk environments, such as areas affected by fragility and conflict, among others. The goal of this review is to identify promising, scalable psychosocial support interventions based on cognitive-behavioral approaches that can be adapted and implemented to build resilience among SME entrepreneurs in FCV environments.⁶

⁴ Working memory is the part of short-term memory concerned with immediate conscious perceptual and linguistic processing.

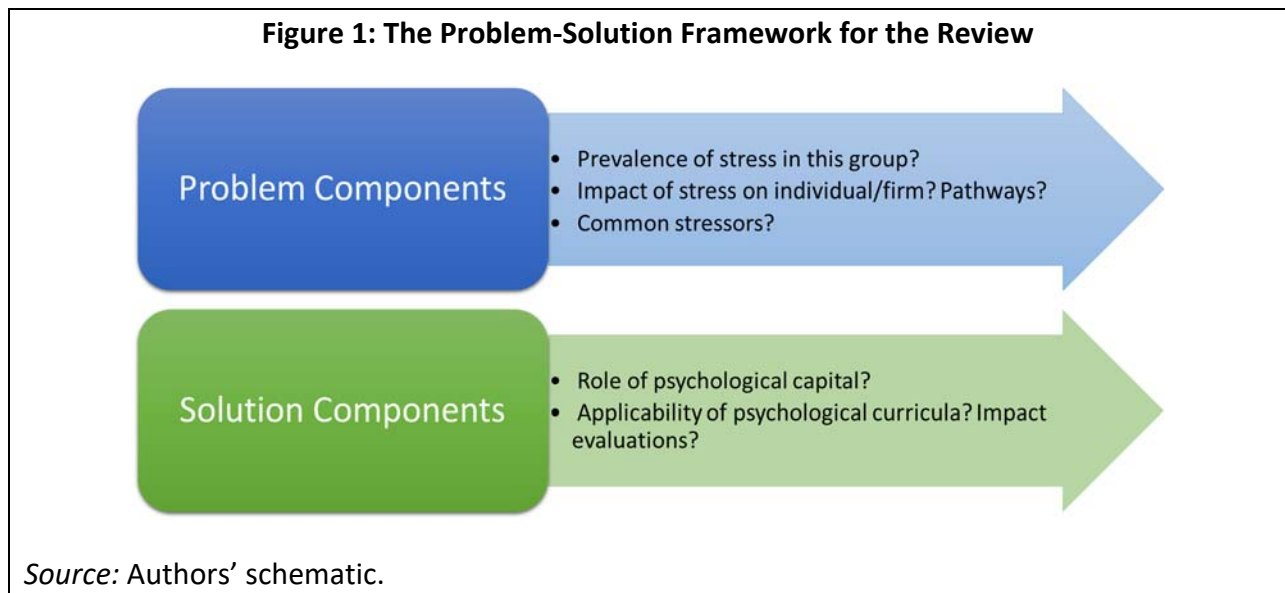
⁵ Warr (1996) defined anxiety as being in a state of low pleasure but high mental arousal, but depression is a state of low pleasure and low arousal.

⁶ Cognitive Behavioral Therapy (CBT) is a tested approach among psychosocial interventions (*Journal of Clinical Psychiatry*, 2008 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2409267/>). CBT refers to “the class of interventions that are based on the basic premise that emotional disorders are maintained by cognitive factors, and that psychological treatment leads to changes in these factors through cognitive (cognitive restructuring) and

The methodology involves reviewing more than 200 peer-reviewed papers that deal with these topics. Given the multidisciplinary nature of this topic (including issues such as stress, small business economics, entrepreneurship, occupational health, cognitive psychology, private sector development in FCVs, and firm productivity), a broad range of topics are covered, including those that are relevant to understanding the prevalence, sources, and impact of stress in the context of entrepreneurship, as well as topics exploring various psychological means of overcoming stress. As an example, keywords (and variations on them) such as small and medium entrepreneurs, entrepreneurial stress, stressors, performance, psychological capital, mental well-being, cognitive resources, psychosocial support, and psychological training were used.

Although not exhaustive, a breadth of scholarly articles was surveyed (including evaluations and meta reviews), books, and other sources (such as dissertations, reports, and web articles) to provide a synopsis and synthesis of relevant literature on this topic. Within these papers, papers that are rich in spelling out the “why” driving the empirical phenomenon were prioritized. Specifically, what are the mechanisms through which stress affects individual and firm performance? Papers that examined the process through which an entrepreneur’s stress spills over to the firm were selected. The literature search was conducted using the Google Scholar database, and a snowball method was used to identify additional studies from relevant publications.

The framework involves understanding the nature of the problem and the potential solution. Regarding the problem, the prevalence and impact of stress on SME entrepreneurs’ mental well-being and business performance is explored. Regarding the solution, before conducting a curriculum stock-taking of different psychological curricula, an investigation of the role of building psychological capital is undertaken (see Figure 1).



behavioral (for example, exposure, behavioral experiments, relaxation training, social skills training) techniques.” In the paper, the terminology “psychosocial support” implies CBT-based psychosocial support.

Aligned with the framework, there are three key questions that guide the review (see Box 1).

Box 1: Key Questions Guiding the Review

1. To what extent does stress affect the mental well-being of SME entrepreneurs and their functioning and business performance? What are the common stressors?
2. To what extent does building the psychological capital of such entrepreneurs lead to improved well-being and better business outcomes?
3. How can such psychological capital among entrepreneurs be built? What are the different types of training curricula worth exploring for this purpose? Has their impact been measured?

The contribution of this paper is to connect the dots in the literature between the fields of mental health/well-being, entrepreneurship, and increasing psychological capital, including resilience, in difficult operating environments. The focus will be to identify mechanisms through which the personal experiences of the entrepreneur start to affect firm performance. This is important to know because where these personal experiences occur due to systemic environment issues (for example, high incidence of violence, or external shocks such as disasters), there might be a role to play to address these as a pathway to improving business performance.

This approach also builds on the World Health Organization's focus on mental health in the workplace through analysis of one group of working people: the *self-employed* or *adult breadwinners*. SME entrepreneurs are a unique target group not only because of their importance to the creation of economic opportunities in FCVs (and, thus, prevention of conflict), but also because they are found to be particularly at-risk as a high achievement group. As such, in an organic sense, they do not usually demand mental health support. Further, the supply of existing programs on mental well-being in FCV contexts is most often targeted to clinically ill populations by hospitals and community health centers. Such institutions do not usually target this group, either because of several other pressing issues in the health system or because they are not "perceived" as at-risk given their status as entrepreneurs.

Thus, cultural norms, expectations of stereotypical behavior from high-achieving groups and breadwinners, and information asymmetries in the health system simultaneously reduce the demand and the supply of such services. The evidence in this paper can inform future programming in SME upgrading activities, including mental health support for adult breadwinner populations in low income country contexts including in FCV countries.

The remaining review is structured as follows. In the next section, the empirical links between stress prevalence and sources and its impact on SME entrepreneurs is explored. The following section contains a review about the extent to which building psychological capital helps to improve the well-being and performance among entrepreneurs, focusing on the pathways/mediating roles of such capital. Finally, the review summarizes leading psychological curricula that have shown empirical results that could be considered for adaptation in the future.

2. Prevalence of Stress and Its Effects among SME Entrepreneurs

2.1 Prevalence of Stress among SME Entrepreneurs

Entrepreneurs are individuals with leadership tendencies and independent work arrangements. As such, they can be susceptible to a higher risk of stress. According to Rokach (2014), individuals in leadership positions (in the fields of education, government, business, and organizations) may be more vulnerable to stress, alienation, loneliness, and emotional turmoil. The author points out that “these may lead to health problems and negatively affect social and familial relationships”, which could ultimately have negative impacts on their productivity. Akiskal and others (2005) studied 263 professionals affiliated with an outpatient psychiatric practice and found that out of the seven job classifications studied (physicians, lawyers, managers, industrialists, architects, journalists, and artists), *self-made industrialists* had the highest rates of hyperthymic and bi-polar traits.⁷ Health literature broadly highlights that individuals with entrepreneurial career intentions are prone to Attention Deficit Hyperactivity Disorder (ADHD)-like disorders, as compared to individuals without entrepreneurial intentions (Dimic and Orlov 2014; Verheul and others 2013).

Empirical evidence is consistent in showing the problem of ongoing stress and anxiety symptoms in entrepreneurs. Boyd and Gumpert (1983) provided the first empirical evidence, which showed that up to 65 percent of entrepreneurs (out of a sample of 450) experienced physical stress symptoms at least once a week. They found that entrepreneurs encounter a ‘*depth and range*’ of problems daily. As such, entrepreneurs are likely to report chronic or ongoing stress. Grant and Ferris (2012) provide a comprehensive description of the stress-related problems faced by entrepreneurs summarized here. Business owners typically operate in highly competitive environments facing a substantial degree of risk and variability (Kariv 2008). In addition, unlike salaried employees, entrepreneurs are accountable for the performance and continuance of their firms (Parasuraman and Simmers 2001). This often results in a stronger identification with their work, a sense of being indispensable, and a heavier workload than that of salaried employees, with many working more than 60 hours per week (Bradley and Roberts 2004; Dolinsky and Caputo 2003; Eden, 1975; Prottas and Thompson 2006) Furthermore, stress can often impact other aspects of the lives of entrepreneurs, with fatigue, irritability, and other stress symptoms spilling over into the non-work domain or negatively impacting health (Buttner 1992; Jamal 1997; Jamal and Badawi 1995; Lewin-Epstein and Yuchtman-Yaar 1991; Parasuraman and Simmers 2001; and Westerlund and others 2004).

Greater mental health problems appear to co-exist with higher life satisfaction for entrepreneurs, highlighting the non-linear nature of the “well-being” problem. There is considerable evidence that a turbulent work environment takes its toll on organizational leaders and workers’ mental well-being (Andrea and others 2009; Melchior and others 2007; and Nielsen and Daniels 2012).

⁷ Hyperthymic temperament, or hyperthymia is a proposed personality type characterized by an exceptionally positive mood and disposition. Bipolarity is a personality type characterized by both manic and depressive episodes, or manic ones only.

At the same time, the work by Andersson (2008) sheds light on the complex compositional nature of well-being among entrepreneurs. The author uses data from the Swedish Level-of-Living Survey for the years 1991 and 2000 and six indicators of well-being to investigate issues of well-being and satisfaction among the self-employed.⁸ These indicators include: (1) job satisfaction, (2) life satisfaction, (3) job being stressful, (4) job being mentally straining, (5) mental health problems, and (6) poor general health. The author finds that self-employment leads to an increase in job satisfaction, while also leading to more mental health problems.

Chronic stress and anxiety affect not just the new, but also seasoned entrepreneurs. According to Robertson (2004), seasoned entrepreneurs (those with more than 20 years of experience in managing their own business) suffer from more stress when compared with other job occupations. Furthermore, according to the study, nearly 70 percent of business owners and managers felt that managing their own business was more stressful than working for someone. This contrasts with the 19 percent who believed that working for someone was more stressful, and with the 11 percent who feel that the levels of stress are the same in both cases.

Among entrepreneurs, those leading SMEs are at a higher risk of stress than those in large enterprises. Compared to managers of large enterprises, Ang (1991) proposed, that SME owner-managers not only had less diversified physical, financial, and intellectual capital, but also tended to invest in a single asset: the firm. Torres (2012) highlighted that, among SME owner-managers, only 60 percent took three weeks of vacation or less per year, and 10 percent took no vacation at all. Structural issues regarding how SMEs are managed also mean that there are fewer avenues to diversify risk and attendant stress. Due to the prevalence of family-run businesses in large parts of South Asia and Africa, SMEs are prone to being single owner-manager driven firms (Bloom and others 2012). As a result, SME entrepreneurs take on multiple roles, including responsibilities for finances, products, accounting, sales and marketing, human resources [HR], and so on. Hence, they keep long hours, and do not delegate their burden of responsibilities to managers. This results in a lower span of control with one manager responsible for several staff in SMEs than in larger enterprises. While a large enterprise has a greater breadth and depth of activities, it is run with more layers of management, including resources to hire trained managers.

Summary (Section 2.1): *All this points to the prevalence of chronic levels of stress and anxiety among entrepreneurs who encounter a greater depth and breadth of problems compared to salaried employees. Entrepreneurs who are more seasoned and those managing SMEs are at higher risk of elevated stress levels. Co-morbidity of symptoms such as ADHD, alienation, depression — and more serious ones such as bi-polarity and hyperthymic traits — can be found among this group. Studies show that self-employment leads to an increase in job satisfaction, while also leading to more mental health problems indicating that well-being is a complex concept.*

⁸ To handle the possible selection of more satisfied individuals and individuals more able to handle stress into self-employment, conditional fixed-effects logit models are estimated for each of the outcomes.

2.2 Effects of Stress on Individuals and Business Performance (and Pathways)

Whereas low to moderate levels of stress can be a positive trigger for the performance of entrepreneurs, chronic stress can potentially be harmful for both well-being and performance in the long run. In the short term, positive stress, also known as “eustress”, may catalyze performance by mobilizing personal resources and increasing “efficiency of information processing and task completion” through positive arousal (Ganster 2005; Lazarus 1966; and Selye 1974). Up to a certain level, stress hormones — such as cortisol — improve learning, memory, and performance (Goodman 2008; Kim and Diamond 2002). However, intense, frequent, or prolonged stress, that is, negative arousal or ‘distress’, can and does eventually lead to ‘strain’ or burnout. This can negatively impact health, well-being, job performance, job satisfaction, and lead to counterproductive work behavior (Bakker, Demerouti, and Verbeke 2004; Gilboa and others 2008; Jex 1998; Maslach 1982; Maslach and Jackson 1981; and Quick 1998).

When levels of stress are high, most of the energy of individuals is directed at coping with stress rather than being focused on enhancing their performance (Sullivan and Bhagat 1992). This, not surprisingly, has direct implications for business performance. In a study conducted with male and female entrepreneurs in Israel, Kariv (2008) finds that, though appraisal of stress varies between genders, for both, positive stress is positively associated with sales turnover of their businesses, whereas negative stress appears to impede it.

The literature points to the following mechanisms through which stress affects business performance of entrepreneurs: (a) depletion of psychological resources; (b) erosion of their influencing and motivating role; and (c) counterproductive work behavior(s).

2.2.1 Pathway 1: Depletion of Psychological Resources

High levels of stress can deplete the psychological resources and capacity of entrepreneurs, thereby lowering their performance. In a meta-analysis of the relationship between stress and leadership, Harms and others (2017) note that as stress builds, individuals start diverting increasingly more psychological resources toward coping with its negative effects such as distraction, lack of sleep, confusion, and so on. This eventually exhausts available psychological resources and leaves them feeling overwhelmed and unable to cope with work. This finding is consistent with earlier theories. Building on Yerkes and Dodson’s (1908) theory of the curvilinear (inverted U-shaped) relationship between stress levels and human performance, Meglino (1977) posited that stress causes individuals to concentrate on fewer factors when performing tasks. Although this narrow focus can enhance performance on routine, simple tasks, performance on more complex tasks — requiring initiative and discretion — suffers in consequence. The effect of stress and stressors may be particularly acute for SME entrepreneurs, who deal with unusually high levels of uncertainty and stress. Indeed, it may make for cognitively costly decisions and choices that can deplete working memory and reduce personal performance (Fernet and others 2016; McGuire and Botvinick 2010; Spears 2011; and Vohs and others 2008).

2.2.2 Pathway 2: Erosion of the Entrepreneurial Influencing and Motivating Role

Leaders facing chronic stress can experience anxiety and depression over time, which can impact their influencing role within the organization, as well as their relationships with employees. Leaders have the capacity to either act as a buffer against or an amplifier of stress for their employees. Stressed leaders may engage in *poor leadership practices* as stress drains their cognitive and emotional resources, thereby impeding their ability to function effectively in their role (Harms and others 2017). This, in turn, has a crossover effect (also known as affective crossover) on employees through transfer of negative emotions (Brummelhuis and others 2014). Sy, Côté, and Saavedra (2005) point to a mood contagion effect, which indicates that when leaders are in a positive mood, individual group members exhibit more positive moods and have more positive affective tones⁹ as well. Stress can also reduce a leader's ability to communicate clearly with employees, making them more prone to disagreements and conflicts — all of which can contribute to higher rates of staff absenteeism and turnover, and lower team performance (Johnson 2008).

2.2.3 Pathway 3: Counterproductive Work Behavior

Cognitive Resource Theory posits that job stressors can induce counterproductive work behavior (CWB) in workers by undermining their self-regulation capacity, as well as by weakening cognitive controls that act as a buffer against CWB (Boye and Jones 1997; and Tucker and others 2009). According to the Stressor-Emotion model, (Spector and Fox 2008), environmental stressors, that is, objective features of the workplace that can act as stressors, can lead to negative emotional reactions, in particular anger and frustration. This can, in turn, translate into undesirable behavior(s) at work. Other types of stressors that are common in entrepreneurs, such as role ambiguity, role conflict, and workload, have all been linked with increased incidence of CWB in workplaces (Fox and Spector 1999; Fox, Spector, and Miles 2001; Miles, Borman, Spector, and Fox 2002). Empirical evidence confirms this phenomenon. Indeed, studies show that overworked and strained individuals tend to respond negatively to stressors resulting in confrontations with coworkers and/or displays of disrespect (Roberts, Scherer and Bowyers 2011).

Such associations between the role of stressors (that is, role overload, ambiguity, conflict) and low personal performance have been determined across a number of studies (Ben Tahar 2014; Tetrick and others 2000; and Wincent and Örtqvist 2009). In a study in New Zealand, Shepherd and others (2010) find a positive relationship between stress and burnout, which subsequently, results in reduced levels of organizational commitment and satisfaction, as well as perceived firm performance. Firm-level decisions around hiring workers, signing new business contracts, the adoption of productivity-improving processes, and private investment levels can also be affected due to the diminished capacity of the entrepreneur (Demerouti, Bakker, and Leiter 2014).

⁹ Affective tone refers to the state of mind or sense corresponding with a particular encounter or stimulant.

Summary (Section 2.2): *The effects of stress on individuals through a high incidence of depression, anxiety and co-morbid symptoms, as well as on firm performance — through the three pathways of depletion of psychological resources, erosion of a leader’s motivational role, and counterproductive work behavior(s) —make the prevalence of stress a mental health and a firm performance priority. That the prevalence, and hence the effects, are pronounced for SMEs is problematic because SMEs comprise a large percentage of enterprises worldwide, particularly in FCV contexts. Importantly, SMEs act as a driving force for economic growth, innovation, and job creation.*

2.3 Common Stressors

Factors that contribute to stress in entrepreneurs (stressors) can arise from various sources, including direct operational activities, professional and personal relationships, career prospects, organizational roles, non-work factors, and the external environment (Cartwright and Cooper 1997; Quick and Quick 1984; and Schuler 1982). In a meta-review of types of stressors, Grant and Ferris (2017) categorized the common sources of stress into six broad categories: (i) financial; (ii) interpersonal; (iii) internal/self-induced; (iv) the job itself; (v) unpredictability/risks; and (vi) work-life balance (see Table 1 below).

Table 1: Overview of Stressors from the Entrepreneurship Literature

BROAD CATEGORY	SUB-CATEGORY AND TYPES	PAPERS
Maintenance and operational stressors	Competition, Innovation, business financing, sales/turnover, business growth, maintaining a client base, and cash flow.	Feldman and Bolino 2000; Gumpert and Boyd 1984.
Interpersonal stressors	<ul style="list-style-type: none"> a) Isolation, for example, a lack of social support and loneliness; b) Team/staff problems, for example, conflict with business partners, customers/clients, or subordinates; and c) Management/supervision issues, for example, recruiting/developing employees, doing work that should be delegated, getting others to ‘make it happen’, and ‘weak links’. 	Akande 1994; Boyd and Gumpert 1983; Buttner 1992; Chay 1993; Eden 1975; Feldman and Bolino 2000; Fernet and others 2016; Gumpert and Boyd 1984; Lewin-Epstein and Yuchtman-Yaar 1991; Tetrick and others 2000; Naughton 1987; Parasuraman and Simmers 2001; Parasuraman and others 1996; Prottas and Thompson 2006; and Stoner e and others 1990.

Internal and work-life balance stressors	<p>a) Concern for quality, grief over business loss/failure, job involvement/immersion in the business, need for achievement and control, desire for applause, sense of distrust, and projecting a strong self-image.</p> <p>b) Working long hours; work-life conflict, for example, difficulty relaxing and no 'real' time off; and trade-off decisions between family and work.</p>	Akande 1994; Boyd and Gumpert 1983; Buttner 1992; Gumpert and Boyd 1984; Kets de Vries 1985; Parasuraman and Simmers 2001; Parasuraman and others 1996; and Shepherd 2003.
Stressors related to the job or role itself	Geography and expansion, paper work and taxation issues, responsibility, role stress, stakeholder expectations, time commitment, and workload.	Buttner 1992; Feldman and Bolino 2000; Gumpert and Boyd 1984; Harris and others 1999; Ortqvist and others 2007; Parasuraman and Simmers 2001; Parasuraman and others 1996; Rahim 1996; Shepherd and others 2010; Vasumathi and others 2003; and Wincent and Ortqvist 2009.
Unpredictability/risk category	Ambiguity, insecurity, uncertainty; and financial, career, family, social and environmental risks; exposure to trauma.	Buttner 1992; Feldman and Bolino 2000; Good and others 2006; Liles 1974 (cited in Vasumathi and others 2003); Mazurana and others 2014; and Savoca and Rosenheck 2000.

Source: Authors' notes based on Grant and Ferris (2017)

All businesses face some common kinds of stressors. There are stressors related to the business environment, such as increased competition, insufficient time or space, technological development, conflicting demands from stakeholders, and so on. In addition, there are some typical operational stressors, such as cash flow management, recruiting and retaining staff, meeting targets, coping with red tape, work-life-balance, and so on. All of these stressors have been shown to increase job stress and anxiety (Ahmad and Salim 2009; Edwards 1992; Hall and Savery 1986; Robertson 2004; and Rythonen and Strandvik 2005).

The entrepreneurial role comes with its own set of stressors as well. Broadly speaking, entrepreneurs suffer from three key role-related stressors: role conflict, role ambiguity, and role overload (Tahir 2016). Role conflict arises when there is a discrepancy in role expectations between the entrepreneur and others (Kahn and others 1964). Role ambiguity stems from a lack of clarity regarding desired expectations, and is intensified by a lack of skills, experience, and information (Tahir 2016). Finally, role overload occurs when entrepreneurs lack sufficient resources to meet the expected commitments and obligations associated with their role (Latack 1981). The third stressor, role overload, can be serious in the case of SME entrepreneurs. High levels of role stress have been frequently linked to withdrawal because of low job satisfaction (Tahir 2016; and Wincent and Örtqvist 2009).

It should be noted that not all stressors stem from business or personal factors. Among these, some are within the entrepreneur's locus of control, while others are outside. Uncertainties in the external environment — which may also be perceived by entrepreneurs to be outside of their control — can also create stressors that impact their ability to function within their business environment. This includes, among others, factors such as natural disasters, large-scale migration, and violent conflict. Across studies, these have been linked to higher stress and anxiety (although not specifically tested with entrepreneurs), as well as general unpredictability and risk that affect functionality and the work of the entrepreneurs (Grant and Ferris 2017; and Tahir 2016).

An additional stressor that may be particularly relevant for entrepreneurs operating in FCV contexts is exposure to traumatic experiences, such as conflict, recurring violence, gender-based violence, sexual assault, and so on. Such experiences can result in psychological trauma. Traumatic experiences can be extremely stressful, and can lead to traumatic stress, which manifests itself in a range of psycho-emotional and psychopathological outcomes, including Post Traumatic Stress Disorder (PTSD) (Iribarren and others 2005; McFarlane 2010; Steel and others 2009; and Strohmeier and Scholte 2015). Tol and others' (2014) meta-analysis of epidemiological surveys shows the prevalence of PTSD in conflict-affected populations to be as high as 15.4 percent (relative to 7.6 percent in the general population).

Studies have shown that war-affected households and individuals tend to have less diversified livelihood sources, assets, wealth, and wages (Good and others 2006; Mazurana and others 2014; and Savoca and Rosenheck 2000). Furthermore, not only does direct exposure to violence harm the well-being of households in FCVs, but also the *perceived* risks from living in those settings. In Uganda, the total losses for households directly exposed to violence amounted to 10 percent, whereas the total losses from perceived risk amounted to 37 percent (Rockmore 2016). Although the literature is scant when it comes to the impact of trauma on entrepreneurs and business performance, the link between trauma and stress, and its subsequent effect on livelihoods is well-established. As such, it is likely to hold true for entrepreneurs in FCV contexts as well.

Table 2: Aggregate Costs of Conflict for Rural Households in Northern Uganda, 2004

	Preferred model	Full controls	Conservative estimates
Location of losses (% of total)			
Never-attacked households	30.0	35.4	17.5
Attacked households	70.0	64.6	82.5
Disaggregation of costs (% of total)			
Exposure to violence	37.1	28.3	43.7
Exposure to risk	62.9	71.7	56.3
Cost as % of GDP			
Overall	0.9	0.7	1.0
From risk	0.5	0.5	0.6

Source: Rockmore 2016

Note: GDP= gross domestic product.

Most of the evidence on understanding the factors that contribute to stress exist for developed countries, such as Germany, the United Kingdom, and the United States, but there is limited information available from developing countries (Johnson 1995; Kirkcaldy and Furnham 1999; Kivimaki and Lindstrom 1995). Only a few studies have focused on the experience of stress, as well as coping mechanisms among entrepreneurs, in developing countries and FCV-affected areas — places in which ordinary stressors are compounded by extraordinary conditions. As such, this is an area ripe for future empirical investigation.

In a forthcoming rapid needs assessment report for the conflict-affected northern territories of Pakistan called the Khyber Pakhtunkhwa/Federally-Administered Tribal Areas (KP/FATA), there is evidence of the unacknowledged mental well-being issues experienced by SME entrepreneurs and their common causes (World Bank 2018). Based on in-depth interviews with 17 entrepreneurs in KP/FATA, the study explores the nature of the problem, perceived causes and effects, as well as current practices to deal with the impact of these challenges. According to the report, SME entrepreneurs described many depressive-type symptoms such as “*agitated mood, disturbances in diet and sleep, nervousness, loss of interest and inability to concentrate on work*”. They recognized the impacts of these symptoms on their productivity and sense of well-being, which in turn lead to a vicious cycle of more stress. Box 2 describes the experiences of these entrepreneurs and perceived stressors in their own words.

Box 2: Snapshots of the Environmental Stressors in Pakistan's KP/FATA Region

Among other issues, the participants of the needs assessment in KP/FATA (World Bank 2018) described security issues as the primary, root cause of all their problems. Due to conflict in the region, people report being in a state of fear for their safety. These circumstances have led to decreased business activities. Since most of the businesses of SME entrepreneurs were either destroyed or faced a high drop in sales due to the security crisis, they attributed their financial difficulties to the ongoing security situation in KP/FATA.

Security issues have also resulted in unfavorable economic conditions for doing business, thereby impeding the chances of success in any business, including the ability to repay loans. Work-related stressors spill over into their personal spaces, affecting the tranquility of family life.

In their words:

"Due to the fear (of bomb blasts/terrorism) people do not want to invest in the expansion of their businesses...if the situation worsens, all of their investments will be in loss". (IDI-005)

"Stress disturbs your daily routine; diet, sleep pattern and you stay awake [the] whole night and go to [the] office in late hours, this disturbs the whole business cycle."(IDI-018)

"(In challenging times) one becomes agitated. When the (work) pressure increases (challenges and stakes are high), the person gives up saying that I cannot do business any more. He feels that he has an ill fate."

"You cannot enjoy your work, you do not get required output. Your customers, your boss, and your staff remain unhappy." (IDI-004)

"Whenever I am reminded of the Army Public School incident, for an hour or two, I am unable to concentrate on work. My attention gets diverted from my main work. It affects my productivity and creativity. I am unable to do the innovation that I am trying to do." (IDI-003)]]

"Due to security issues, trainers from outside the city do not come to train people here." (IDI-009)

"If someone has made an investment and the market rate of the product drops, we have to bear losses." (IDI-005)

"Due to constant stress, there are frequent issues with the family, such as issues with [my] wife, with parents and siblings, etc." (IDI-005)

Source: World Bank Group Rapid Needs Assessment in KP/FATA (2018). Forthcoming.

Summary (Section 2.3): *Despite limited empirical studies about the stressors experienced by entrepreneurs in developing and FCV-affected countries, the literature suggests that the combination of entrepreneurial stressors (role conflict, ambiguity and overload) and external environment uncertainties due to factors such as natural disasters, conflict or migration, can negatively affect the functioning of the entrepreneur at various levels. This requires a better understanding of how to increase the psychological (cognitive and behavioral) capacities of entrepreneurs working in these regions so that they can deal with the increasing number of challenges while persisting in growing their businesses.*

Since stress depletes psychological resources, the next section will examine strategies to (re-)build psychological capital to mitigate such stress. As part of this effort, the study will identify and evaluate the various interventions and training curricula that have been tried and tested in the field of psychology through rigorous impact evaluations. The goal is to identify approaches that might be useful for SME entrepreneurs who must find an effective means of functioning in high risk environments.

3. Strategies to (Re-)Build Psychological Capital for Stress Mitigation

Psychologically healthy, thriving entrepreneurs not only benefit themselves. They are critical to employee well-being and business outcomes. As stress depletes psychological resources, a key question becomes how to rebuild these capabilities. One way to think about it is to view it from the lens of an entrepreneur, that is, through different “types of capital”. A successful entrepreneur would possess four sources of capital: financial, technical, relational and psychological. Since stress depletes psychological resources and through that, the other forms of capital, the role of psychological capital (and mindfulness) should be examined as a means of mitigating the effects of stress.

The literature shows that psychological capital can play a mediating role in stress mitigation by promoting positive psychological responses to stressful situations (Luthan, Youssef, and Avolio 2009). The development of the psychological capital of entrepreneurs may help them to build resistance against a wide range of psychological stressors as they seek to lead new ventures and/or further develop well-established ventures. In this context, Hmieleski and Carr (2007) investigated the relationship between the psychological capital and work tension of entrepreneurs regarding their level of job satisfaction. They used a national random sample of 144 founders in the United States who were the top management team leaders of their new ventures and found it to be significantly negative. The study found that psychological capital can reduce the negative effects of work tension on job satisfaction.

Using a meta-analysis of 51 independent samples, psychological capital is shown to have a strong positive relationship with desirable attitudes and behaviors (Avey and others 2010). Other studies have found that increasing/strengthening the psychological capital of the owner/manager positively impacts the psychological capital of employees (Story and other 2013), as well as levels of trust and perceived performance among employees (Norman and

others 2010). It also lowers counterproductive work behavior(s) and thoughts of quitting among the leaders (Avey and others 2010).

This begs a deeper enquiry into what constitutes “psychological capital”. The literature defines psychological capital as a higher-order core construct comprised of the following elements: hope (Snyder, Cheavens, and Sympson, 1997), (self-)efficacy (Bandura 1997), resiliency (Masten 2001) and optimism (Carver and Scheier 2003). In short, the acronym would be formulated as “HERO”.

Hope reduces the perception of feelings of uncontrollability, unpredictability, and vulnerability in people (Snyder 2000). Related, self-efficacy relates to the general belief in one’s ability to produce high levels of performance. It also has profound implications for people’s ability to manage their own stress (Bandura 2008). Resilience refers to the ability of individuals to recover from undesirable experiences, as well as their ability to provide their best response to changing and stressful life demands (Tugade and Fredrickson 2004). Optimism is negatively related with stress, as more optimistic individuals tend to exhibit lower levels of workplace stress (Totterdell, Wood, and Wall 2006).

When applied to the context of entrepreneurs in FCVs, hope and optimism have implications for both the performance of entrepreneurs, as well as their ability to cope with psychological distress and uncertainties (Carver and Scheier 2003; Horton and Wallander 2001; and Ong, Edwards, and Bergeman 2006). The positive link between optimism and well-being is established in the literature, but it is particularly important in the context of entrepreneurship. Studies find optimists to be more open to experiencing (and enjoying) different forms of adversity, with a tendency to rise to the challenge. Moreover, optimists persist in the pursuit of their goals in the face of adversity (Carver and Scheier 2003; Scheier, Carver, and Bridges 2001). Similarly, hope is positively linked with the performance and satisfaction of workers, as well as with the dispositional hope of managers. In this context, it has been shown to increase their sense of responsibility toward employees and societal issues (Andersson, Giacalone, and Jurkiewicz 2007; Luthans and Youssef 2004). Hope can also act as a buffer against psychological distress, and it can enhance one’s capacity to respond to unexpected shocks or losses (Ong, Edwards, and Bergeman 2006; Lopez, Snyder, and Pedrotti 2003).

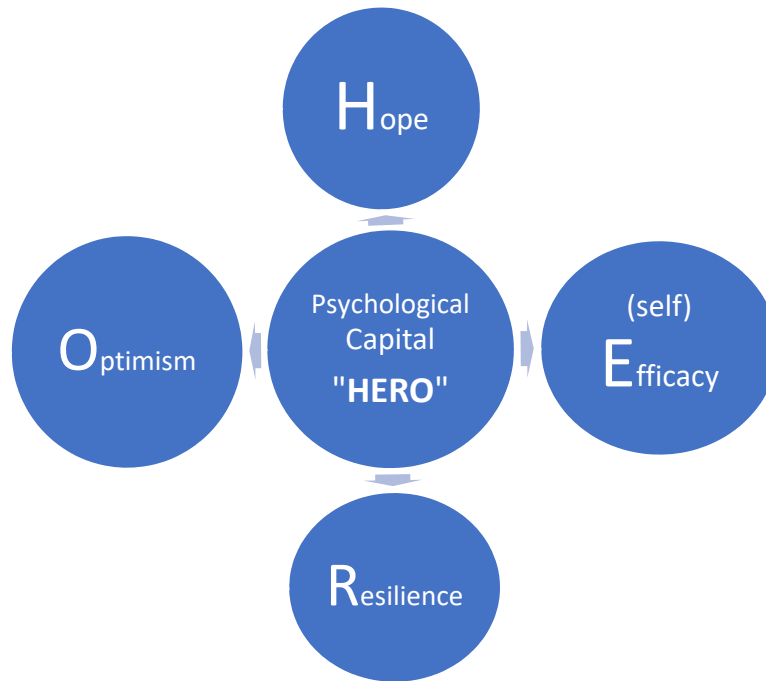
Self-efficacy is another important asset for entrepreneurs to retain and build. Recent studies have begun to consider the relationship of entrepreneurial-specific measures of these psychological capital factors with the job satisfaction of entrepreneurs. For example, studies by Bradley and Roberts (2004), and Hmieleski and Corbett (2006), have each identified a robust positive relationship between the degree to which individuals perceive themselves as having the ability to successfully perform the various roles and tasks of entrepreneurship (self-efficacy) and their actual satisfaction with their jobs as entrepreneurs. Self-efficacy is closely related to a frequently used indicator in psychological studies, namely, an individual’s locus of control.

Resilience has long been thought to be a key characteristic of entrepreneurial performance and well-being, although research on the psychological resilience of entrepreneurs is relatively scant. Resilience is the capacity to bounce back from negative experiences and adapt to a new situation.

In this context, it is critical for entrepreneurs as they need to show endurance when confronted with high risk and resource-constrained conditions (Hmieleski and Carr 2008; Markman, Baron, and Balkin 2005). A longitudinal study conducted with small entrepreneurs in Spain showed resilience to be an important predictor of entrepreneurial success, with resourcefulness being one of the driving factors (Ayala and Manzano, 2014).

Resilient individuals tend to be more adaptable to changes in the workplace, and more emotionally stable in dealing with adversity. In addition, they are able to thrive and learn in the face of adversity (Frederickson 2004; Masten 2001). However, resilience is not a fixed attribute; rather, it can be both a trait and a process (Cicchetti 2010; Jacelon 1997;). Rutter (2012) posits that exposure to stress or adversity can alter resilience toward future stressors in either direction. Specifically, it can lower one’s vulnerability through a steeling or strengthening effect — or increase it through a sensitization effect.

Figure 2: Framework for Psychosocial Curricula Design: Psychological Capital or “HERO”



Source: Authors’ schematic based on self-efficacy (Bandura 1997), optimism (Carver and Sheier 2003), hope (Snyder, Cheavens, and Simpson 1997), and resiliency (Masten 2001).

To conclude the discussion of psychological capital and its constituents, research from positive psychology and organizational behavior shows that when the four “HERO” psychological resources — hope, self-efficacy, resilience, optimism — are combined, they assume a higher order function. Specifically, they are a “stronger predictor of attitudes and performance” than any one of the four components by itself (Luthans and others 2007). In addition, building this

type of capital can have a positive effect on the pathways through which stress tends to affect individual and firm performance.

A concept that is closely connected to psychological capital is mindfulness. The research shows that the two interact to yield higher benefits. Despite its popularity in clinical psychology literature, mindfulness has only been recently being identified as an important construct in the fields of management and firm productivity (Altizer 2017; Brown and Ryan 2003; and Brown, Ryan, and Creswell 2007). A mindful person is defined as someone who has heightened awareness of the present reality and is able to view situations “for what they really are” without worrying about the past or the future (Andrea and others 2009).

The recent surge of clinical research shows the beneficial psychological properties on mindfulness, specifically providing evidence of its positive relationship with one’s well-being (Brown and Ryan 2003; Weinstein, Brown, and Ryan 2009; and Weinstein and Ryan 2011). When one practices mindfulness, one is able to achieve a sense of separation between the self and events that facilitates the working of the elements of psychological capital. Altizer (2017) reviewed the current literature on mindfulness to find that it improved overall health and stress management for individuals. It was also positively correlated with productivity and performance of individuals, teams, as well as leaders. In another study conducted with four groups of Chief Executive Officers (CEOs)/presidents/top, middle, and junior managers, and entrepreneurs, Roche and others (2014) tested the effect of levels of mindfulness and psychological capital on mental well-being. Across all groups, mindfulness was negatively associated with dysfunctional outcomes such as anxiety, depression, and negative effect of the managerial leaders and burnout of entrepreneurs. Mindfulness and psychological capital appear to enhance each other’s functioning in achieving positive emotions. Similarly, psychological capital was found to be positively associated with mindfulness, whereas for measures of dysfunctional mental well-being, this association moves in different directions (Roche and others 2014).

Summary (Section 3): Overall, these factors highlight two key aspects of psychological capital. First, “HERO” psychological resources — hope, self-efficacy, resilience and optimism — can improve performance vis-à-vis stress mitigation. It can also build well-being and coping capacity. Second, these resources can be actively cultivated. Building psychological capital with mindfulness is linked to significant improvements in well-being at both the individual and organizational levels. Indeed, it is particularly promising in the context of entrepreneurship.

The next section will explore various existing training curricula utilized in the field of psychology to cultivate and grow psychological capital. Training types will be defined, and results from impact evaluations or rigorous evidence will be summarized with a view to their relevance to the target group of SME entrepreneurs.

4. Psychosocial Interventions (Based on CBT) to Grow Psychological Capital

Behavioral economics and cognitive psychology provide a set of tools to address cognitive resource depletion, restoration of psychological well-being, and the cultivation of psychological capital. Although the field of psychology has developed various outcome measurement assessments, these have been traditionally used for mental health assessments.¹⁰ Thus, the literature is relatively scant when it comes to interventions that provide CBT-based psychosocial support for *entrepreneurs*. Typical entrepreneurship training curricula focus on developing hard skills, such as financial literacy, marketing, and accounting — or soft skills, such as teamwork, punctuality, and so on. Limited work has been done within the field of entrepreneurship to build the psychological capital of entrepreneurs, although this is changing.

A promising method that addresses depression, anxiety and stress-related symptoms in building psychological capital seems to be based on cognitive-behavioral therapy (CBT) approaches in a range of settings, including FCV contexts (Blattman and others 2017; Kessler and others 2009; Ma and Teasdale 2004; Mataix and others 2015; Mohr and others 2005; Piet and Hourgaard 2011; Spector and others 2014; and Teasdale and others 2000). Most of these have been tested with a variety of populations (for example, at-risk youth, refugee populations, pregnant mothers, and others). However very few studies have dealt with entrepreneurs as a target group.

Given the limited data on CBT-based psychosocial support interventions for entrepreneurs, it is important to identify the key CBT-based psychosocial support interventions that have been most commonly used to build psychological capital among a variety of populations in both mental health and non-mental health contexts. These interventions would contain the most data and coverage thus far. A review of their purpose is then provided, including mechanisms in which psychological capital is built. A summary of the impact of such interventions on any population and entrepreneurs will be provided. If there are some recent studies that focus on developing soft skills or that use behavioral interventions for entrepreneurs, these will also be captured as they can be just as effective when it comes to improving business performance. Such stock-taking

¹⁰ A common quantitative measure of the burden of diseases or mental disorders is Disability-Adjusted Life Year (DALY). It is calculated as the sum of the Years of Life Lost (YLL) due to premature mortality in the population, and the Years Lost due to Disability (YLD) for people living with the health condition or its consequences. Low-intensity psychosocial support interventions have proven to be extremely cost effective in lowering DALY. A recent study on the cost effectiveness of 44 low-intensity psychological interventions in Sub-Saharan Africa shows that the most cost-effective interventions to treat mental disorders (in this case, schizophrenia, bipolar disorder, depression, epilepsy, and heavy alcohol use) cost as low as \$3.25-\$3.80 per capita per DALY averted (Chisholm and Saxena 2012). Another study reviews the cost effectiveness of CBT-based interventions in high-income countries. It finds that cost per capita per DALY averted using CBT ranges from \$3,500-\$9000 when delivered through public psychologists (Myhr and Payne 2006). This is quite cost effective when considering that the Commission for Macroeconomics and Health (2001) determined interventions to be very cost effective if the cost of each DALY averted is lower than one year of average per capita income.

would contribute to creating a repository of psychosocial support curricula and approaches that practitioners could consider adapting to entrepreneurs.

The next section summarizes a range of CBT-based psychosocial support training curricula that are aimed at reducing psychological distress, including Cognitive Behavior Therapy (CBT), Mindfulness-based Cognitive Therapy (MBCT), Rational Emotive Behavior Therapy (REBT), and Problem Management+ (PM+). Other curricula not based on CBT are also summarized. Each of these curricula has been tried across various contexts with distinct target groups. They have shown varying degrees of success in reducing psychological distress. (See Table 3 for a summary of relevant themes, structure, and delivery of each curricula.)

4.1 Psychosocial Curricula

4.1.1 Cognitive Behavior Therapy (CBT)

CBT is both an approach and a curriculum type. Several others have emerged with CBT as a basis that will be covered later. As an approach, CBT focuses on developing a set of strategies that individuals can use to cope with problematic situations, including changing different patterns of thinking (for example, thoughts, beliefs, and attitudes), behaviors, and emotional regulation (Field and others 2015). The simple idea behind CBT is that an individual's unique patterns of thinking (cognition) are significant factors in how they experience their surroundings (emotions and feelings) and the type of actions they take (behavior). As these patterns of thinking have an impact on behavior, it follows that addressing them — where they have become maladaptive — can change one's experience and hence, performance (Martin 2016).

At a behavioral level, CBT interventions help people slow their automatic thinking processes that rely on heuristic shortcuts. Instead, they are taught to engage in slower, more deliberative thinking that can potentially lead to better decision-making (and pro-social behavior). As such, CBT can promote greater situational awareness, better recognition of high-stakes situations where automatic thinking could lead to bad decisions, and more reflective thinking in such situations (CBT 2.0 User's Manual, ideas 42 and UChicago Crime Lab).

Almost all CBT curricula are delivered through repeated, longer-term sessions, often utilizing feedback and "homework" to help participants understand their progress and/or learn from their mistakes. It can be administered individually or in group sessions. Studies show the latter approach tends to be both cost effective and therapeutically equivalent to the former in terms of impact (Oei and Dingle 2008; Tucker and Oei 2007). CBT has also been administered through pre-recorded videos, phone calls, and therapist-delivered internet sessions to make them easier to administer, access, and scale up.

Traditionally, CBT has been used in the context of mental health, for example, to reduce depression, anxiety, and so on in various populations (Kessler and others 2009; Mataix and others 2015; Mohr and others 2005; and Spector and others 2014). However, its application in non-mental health areas and situations is growing. One example of this is the "Becoming a Man"

(BAM) program administered with at-risk adolescents in Chicago. The program succeeded in significantly reducing violent crime arrests, and in improving school engagement and graduation rates among participants through a reduction of automatic thinking (Heller and others 2017). A similar study in Liberia used a CBT module to foster self-regulation, patience, and a non-criminal identity and lifestyle for at-risk youth. It succeeded in dramatically decreasing crime and violence (especially when followed by a cash grant). The cost of delivering the CBT training was \$189 per person, and receiving the therapy alone was sufficient in reducing antisocial behavior by 0.25 standard deviation (Blattman and others 2017).

The use of CBT is less common, though not altogether absent, in the context of entrepreneurship. In a study of self-employed people in the Netherlands, the efficacy of two types of CBT-based curricula was compared: (i) a combined curriculum individually-delivered by labor experts comprised of psycho-education on work stress, relaxation, REBT, and so on; and (ii) a group CBT curriculum delivered by psychotherapists focused on cognitive restructuring, time management, conflict handling, and so on. The combined intervention successfully reduced the number of sick days taken due to psychological complaints (for example, anxiety, depression, burnout) relative to both the CBT intervention and control groups. Moreover, it improved psychological outcomes as well. This study suggests that interventions with entrepreneurs do not necessarily need to be overly complex to be successful (Blonk and others 2006).

4.1.2 Mindfulness-Based Cognitive Therapy (MBCT)

MBCT is an eight-week meditation program that relies on combined elements of CBT and mindfulness-based stress reduction (MBSR). Kabat-Zinn (1991) originally developed it to treat recurrent depression (Segal, Williams and Teasdale 2013). Specifically, it builds on CBT by including mindfulness exercises, such as the body scan, simple yoga exercises, and sitting meditation. The goal of MBCT is to develop present moment awareness. However, unlike CBT, it focuses on developing acceptance of thoughts and emotions without judgment, thereby allowing thoughts to drift in an out rather than getting caught up in negative mental loops or dwelling on negative emotions when they arise (Harley Therapy 2014; Piet and Hougaard 2011).

MBCT is a mental health treatment that relies on evidence-based practices and is administered in a group format (Segal and others 2012). The sessions utilize various mindfulness-based tools, which are taught through direct experience and practice, and guided by an instructor. Earlier sessions focus on teaching basic mindfulness practices such as a body scan (focused on observing tension and sensations in the body), walking meditation, breath meditation (focusing attention on one's breathing), and gentle yoga stretching, as well as practices such as short breathing space and mindful eating. The latter sessions focus specifically on depression-related practices, such as "responding effectively to difficult internal experiences, decreasing reactivity to thoughts previously associated with depression, cultivating an understanding of one's 'own warning signs of depression', and developing a specific action plan to implement" (Metcalf and Dimidjian 2014).

A review of research findings demonstrates that MBCT is quite effective in preventing a relapse in individuals who have experienced three or more episodes of depression (Ma and Teasdale 2004; Piet and Hourgaard, 2011; and Teasdale and others 2000). Indeed, it can be just as

effective as antidepressants if not more so (Freeman and Freeman 2015). Patients also demonstrate a significant increase in mindfulness and a reduction in rumination and cognitive reactivity (Winnebeck and others 2017). There was relatively little literature regarding the application of MBCT to non-mental health populations, including entrepreneurs. However, in the one study that comes closest, as it studies health care professionals and students, MBCT has been shown to be effective in increasing mindfulness and self-compassion, as well as in reducing rumination and stress (Metcalf and Dimidjian 2014).

4.1.3 Rational Emotive Behavior Therapy (REBT)

REBT is a cognitive-experiential-behavioral system of psychotherapy that helps people identify negative, irrational or dysfunctional thoughts and feelings that are self-defeating or socially sabotaging. People can then rationalize to dispute and replace them with healthier, more productive beliefs (Ellis 2002; Psychology Today n.d.). The goal of REBT is to help people understand that negative thoughts and emotions that arise from faulty and irrational belief systems can cause psychological distress, thereby resulting in self-destructive actions or behaviors in important relationships and situations. Once identified and understood, these irrational beliefs can be challenged and replaced with positive beliefs that instill better emotional well-being, and the positive beliefs can then be used to help build more successful personal and professional relationships.

REBT can be administered to individuals, couples, families or groups. It is adapted to fit the requirements of the target population by applying the basic “ABCDE” model: (A) activating event; (B) beliefs (rational and irrational); (C) consequences (emotional, behavioral, and cognitive); (D) disputing irrational thoughts and beliefs; and (E) more efficient, adaptive ways to think, feel, and behave (David and others 2005). The first three steps identify and diagnose the negative thoughts and feelings experienced by people; the latter two focus on challenging and replacing them with more positive and effective ones. REBT is equally effective when administered in groups as compared to individual therapy. It is also efficient for clinical and non-clinical populations across both gender groups and for a large age-range. Interestingly, structure and delivery also seem to matter, with highly trained therapists and a higher number of REBT sessions producing better outcomes (David and others 2005).

Since its introduction in 1955, REBT has been used across various target groups to successfully treat a range of psychological disorders and reduce occupational stress. Meta-analysis of REBT shows it to be effective for a wide range of clinical diagnoses and outcomes. In the occupational space, a study using REBT in Nigeria shows significant and sustained reductions in occupational stress, as well as scores for occupation-related irrational beliefs and work ability when administered with electronic workshop instructors (Ogbuanya and others 2017).

4.1.4 Problem Management Plus (PM+)

PM+ is a short, low-intensity, transdiagnostic CBT-based psychosocial support intervention for adults impaired by distress in communities exposed to adversity or suffering. It helps to alleviate a range of psychological and practical problems that participants identify as relevant to their lives, including common mental health problems (Dawson and others 2015; WHO 2016). It is

transdiagnostic in the sense that it applies “the same underlying principles across mental disorders, without tailoring the protocol to specific diagnoses” (McEnvoy, Nathan, and Norton 2009). The focus of PM+ is on problem management, not problem solving, as people in adverse situations may be faced with problems that are beyond their scope to solve. Thus, PM+ integrates a therapeutic approach to introducing problem management and evidence-based behavioral strategies. As such it enhances people’s ability to adapt to and manage the problems they face — and find respite from them (Dawson and others 2015; WHO 2016).

Some aspects of CBT are modified and simplified in the PM+ module to make it simpler to implement, and more feasible for communities that may not have many specialists who can deliver more complex psychological interventions (Dawson and others 2015). PM+ was originally developed as an individual five-week curriculum, where participants meet once a week for 90 minutes with trained “helpers”. The four core strategies of PM+ are: (1) managing stress (to better manage anxiety and stress); (2) managing problems (strategies to address problems); (3) get going, keep doing (improving levels of activity); and (4) strengthening social support (improving the capacity to engage and seek support from family, friends, community organizations, and so on). PM+ also incorporates a psychoeducation component by which participants can learn about common reactions to adversity (Dawson and others 2015; WHO 2016). More recently, the original design has been adapted to be administered in group settings (using longer, three-hour sessions and group activities), and across various geographic and socio-cultural contexts (Dawson and others 2015).

The effectiveness of individual and group-based adaption of PM+ has been established in the context of Nairobi, Kenya, and Peshawar, Pakistan. In Kenya, the effectiveness of PM+ was compared to that of facility-based Enhanced Usual Care (EUC) to treat common mental disorders among victims of gender-based violence in urban areas. Results show a 3.33-point difference in the GHQ-12 score (which measures psychological distress) of patients in favor of PM+, as well as statistically significant improvements in impaired functioning and post-traumatic stress when compared to EUC (Bryant and others 2017).

In the KP province of Pakistan, both versions of PM+ have been shown to be effective in reducing symptoms of anxiety, depression and post-traumatic stress in both men and women (Hamdani and others 2017; Khan and others 2017). Results from the group-based PM+ module, delivered by lay-helpers with no mental health specialization, show statistically significant improvements in depression, anxiety, general psychological profile and functioning among women with common mental disorders (Khan and others 2017). The fact that PM+ can be delivered with short-term training to non-specialized health care professionals gives it a comparative advantage in FCV settings where per capita health care support is very low.

Taken together, CBT, MBCT, REBT and PM+ capture the majority of CBT-based approaches in psychosocial training that have been measured for impact. There are some others - not explicitly based on CBT approaches - useful for this review as they have rigorous measurement approaches.

4.1.5 Other Trainings

Although it is not based on CBT approaches per se, Personal Initiative Training (PIT) is positive psychology-based training. As such, it focuses on developing a mindset of self-starting behavior, innovation, identifying and exploiting new opportunities, goal-setting, planning and feed-back cycles, and overcoming obstacles. A personal initiative mindset focuses particularly on entrepreneurial behaviors. In this regard, it involves a willingness and readiness to “act as a result of cognitive, affective, and motivational orientation and organization that is in tune with solving entrepreneurial challenges” (Campos and others 2017). It teaches entrepreneurs to look for ways to make their businesses stand out (relative to others), overcome adversities and/or setbacks, and plan effectively for opportunities and the future of the business. It is based on the three themes of self-activity, persistence and proactivity.

PIT is a four-week program, which includes 36 hours of classroom instruction across 12 half-day sessions. Classroom instruction is completed with in-person mentoring and business visits by trainers to ensure that the skills acquired in the classroom are being adequately incorporated into practice. In addition to providing four months of personalized, in-house mentoring to entrepreneurs, trainers also conduct visits to businesses (for 3 hours each month) to answer entrepreneurs’ questions and help them transfer their newly-learned skills into practice.

Though a relatively new concept, PIT has already proved to be an effective means of improving business performance across various contexts. A small experiment in Uganda using PIT improved personal initiative behavior of entrepreneurs and increased sales by 27 percent and the number of employees (which is a proxy for the size of the business) by 35 percent (Frese and others 2016). A more recent study in Togo provided the same training to female business owners. As a result, firm profits increased by 30 percent (relative to an 11 percent increase with traditional business training), or around \$60/month on average (Campos and others 2017). The total cost of delivering the training was approximately \$750 per person (the same as the traditional Business Edge training cost), indicating that with profits increasing by \$60 on average per month among participants, PIT can pay for itself within one year.

Box 3: Key Themes in Designing Psychosocial Curricula for Entrepreneurs

Based on a review of the literature, a few key themes emerge as relevant to the training and building of psychological capital in entrepreneurs: (a) enhancing the level of 'psychological capital', such as self-efficacy, locus of control, hope, resilience and optimism; (b) coping with stress or anger management (requires a mindfulness approach to understanding triggers); (c) building closer relationships and social support, which involves developing emotional intelligence and communications skills; (d) creating an effective work-life balance and reducing a substance disorder (if applicable); and (e) error-learning or rewiring concepts around “failures” and treating them as outcomes for learning. These approaches also highlight the importance of a mutually-respectful relationship between the trainer and the adult student, whereby the trainer is learning while teaching to build trusting relationships during the course of the training (Freire 1968).

Source: Authors’ notes.

4.2 Summary of Themes, Structure, Delivery, and Cost of Psychosocial Support Curricula

All five curricula outlined in the previous sections can be applied to treat psychological distress in various population groups. Broadly speaking, the first four focus on recognizing and dealing with negative thought patterns, emotions or actions, either by cultivating acceptance, ameliorating their effects, or modifying behavior in a more positive way. In this context, then, they are relevant to FCV contexts. In terms of their structure, most psychosocial support curricula (especially in non-mental health contexts) utilize face-to-face interactions. Face-to-face sessions can be both group or one-on-one in nature, with the latter being more commonly used for mental health-related illnesses. However, almost all can and have been adapted to be administered in group settings. PIT, while not CBT-based, has been used exclusively for entrepreneurs. The cost of implementation of these interventions ranged from \$189 per person for CBT in Liberia to \$750 per person for PIT in Togo. Table 3 (below) summarizes the standard modules, themes, structures, and delivery of each of these curricula in more detail.

Table 3: Comparison of Common Psycho-social Support Curricula (Theme, Structure, Cost)

Intervention	Standards themes	Structure & Delivery	Cost
Traditional Cognitive Behavior Therapy (CBT)	<ol style="list-style-type: none"> 1. Social connectedness (community connections, how actions affect others; decision-making scenarios). 2. Recognizing automatic thoughts (understanding and identifying thoughts/ beliefs and subsequent reactions etc.). 3. Thinking of new ways to respond (slowing down automatic thoughts, devising alternative responses, responding to conflict rational self-analysis). <p>(CBT 2.0 Curriculum, Ideas42 and Crime Lab)</p>	Group or individual; repeated long-term sessions (3-4 months), also utilizing feedback and homework; delivered in-person, in groups, over the phone, internet, videos, and so on; mostly delivered by trained facilitators of varying levels of expertise.	\$189/person in Liberia (Blattman and others 2017)
Mindfulness-based Cognitive Therapy (MBCT)	<ol style="list-style-type: none"> 1. Awareness and automatic pilot 2. Living in our heads 3. Gathering the scattered mind 4. Recognizing aversion 	8 weekly group sessions of approximately 2 hours each, plus 6-hour practice sessions; individual daily homework in between sessions; can be delivered	\$297/person in UK (Kuyken and others 2008)

	<ol style="list-style-type: none"> 5. Allowing/letting be 6. Thoughts are not facts 7. Taking care of self 8. Maintaining and extending new learning. <p>(Segal, Williams and Teasdale 2013)</p>	online or through trained facilitators.	
Rational Emotive Behavior Therapy (REBT)	<ol style="list-style-type: none"> 1. Activating event 2. Beliefs (rational and irrational) 3. Consequences 4. Disputing irrational thoughts/feelings 5. Effective adaptation. <p>(David and others 2005)</p>	Adaptable: individuals, couples, families or groups; facilitated by trained therapists; higher number of sessions is better.	\$518.55/person in Romania (Sava and others 2009)
Problem Management Plus (PM+)	<ol style="list-style-type: none"> 1. Managing stress 2. Managing problems 3. Get going, keep doing 4. Strengthening social support. <p>(WHO 2016)</p>	5 weekly group or individual sessions of 90 minutes and 3 hours each, respectively; can be adapted for groups; delivered by trained, lay-person, that is, non-mental health specialists.	\$90/person - \$300/person (from ongoing PM+ in Pakistan impact evaluation. World Bank 2018)
Personal Initiative Training (PIT)	<ol style="list-style-type: none"> 1. Self-starting behavior 2. Innovation, identification and exploitation of opportunities 3. Goal-setting 4. Access to finance 5. Planning 6. Feedback 7. Overcoming obstacles 8. Individual project. 	12 half-day group sessions across four weeks; 36 hours of instruction; group and individual components; individual component includes personalized in-person support for four months; and three-hour long business visits by trainers.	\$750/person in Togo (Campos and others 2017)

Source: Authors' notes

4.3. Contextual Adaptation of CBT-Based Psychosocial Support Curricula

Several curricula were identified that could be relevant to the objective of building psychological capital among entrepreneurs. However, the absence of a relevant, off-the-shelf psychosocial support intervention for entrepreneurs in developing countries means that any intervention for this specific population needs to be locally adapted to ensure suitability to the local context, and especially to the needs of the target population (Bernal 2006; Castro, Barrera, and Holleran Steiker 2010). The literature suggests that one way to do this would be to employ the Rapid Research Methods developed through the DIME Methodology (Design, Implementation, Monitoring, and Evaluation) to adapt interventions (Applied Mental Health Research Group 2013). The DIME model uses a series of activities that combine evidence-based programming with rigorous monitoring and impact evaluation. The objective is to provide a rational basis and approach for local programming, while also generating information and lessons learned that can inform future services.

5. Concluding Remarks

The primary purpose of this literature review was to summarize the evidence about links between stress and the performance of entrepreneurs leading SMEs in high-risk, FCV affected environments. The review then identified promising psychosocial support interventions that could be adapted and implemented to build resilience of SME entrepreneurs in FCV contexts.

According to the literature, entrepreneurship is arguably one of the most stressful occupational choices because entrepreneurs typically operate in competitive environments with high levels of risk and uncertainty. In other words, the psychological price of being an entrepreneur is high compared to other professions. Persistent stress can lead to 'strain' or burnout that negatively impacts health, well-being, job performance, and job satisfaction at the individual level. In turn, the low functioning of the entrepreneur affects business performance through three key mechanisms: (a) depletion of psychological resources; (b) erosion of the entrepreneur's influencing and motivating role; and (c) counterproductive work behavior(s). These effects are found to be more prominent for SMEs (over large firms), seasoned entrepreneurs, and those working in FCV-affected environments.

The problem is more acute for SMEs in FCV-affected environments. This is cause for concern in terms of economic development because SMEs are the lifeline of job creation, innovation and firm growth in FCV contexts. Across the five categories of stressors — maintenance, interpersonal, internal stressors, job-/role-related, and the external environment — stress periods are likely to be longer and persistent, and the intensity higher in FCV contexts. Since persistently high levels of stress can lead to health problems and negatively affect productivity, it is important to focus on the psychological well-being of SME entrepreneurs in FCVs to improve their overall performance and resilience.

In order to reduce stress in entrepreneurs, the literature points to increasing “psychological capital”, comprised of traits such as hope, self-efficacy, resilience and optimism (HERO). Mindfulness is another positive psychological resource that can significantly contribute to well-being and stress management in entrepreneurs. Psycho-social support interventions based on CBT, such as traditional CBT, MBCT, REBT, PM+ and others, have emerged as options to improve mental well-being and psychological capital across a broad spectrum of target groups, as well as in addressing issues beyond core mental health disorders. Although the evidence of their effectiveness with entrepreneurs is relatively scant, there are some promising results both with CBT-based curricula, as well as with curricula focused on building soft and socio-emotional skills.

In conclusion, based on this review of the literature, there seems to be promise, ex-ante, in FCV environments in adapting CBT-based curricula to improve the psychological capital and mental well-being of SME entrepreneurs who face persistently high levels of stress. However, to date, no evidence exists about what the impact of such an intervention would be in FCV environments or in low- and middle-income countries (LMICs). Given that SMEs comprise a large percentage of enterprises worldwide — and that they are important drivers of income and growth (especially in LMIC and FCV contexts) — it would be important to evaluate whether the effectiveness of CBT-based psychosocial support interventions can be replicated in these new settings, and, importantly, whether they can lead to better behavioral outcomes and improved business performance over time.

Bibliography

- Afridi, M. I. 2008. "Mental health: Priorities in Pakistan." *Journal of Pakistan Medical Association* 58(5): 225–226.
- Ahmad, S.Z. and F.A.A. Salim. 2009. "Sources of stress and the coping mechanism for Malaysian entrepreneurs." *African Journal of Business Management* 3(6): 311–316.
- Akande, A. 1994. "Coping with entrepreneurial stress: evidence from Nigeria." *Journal of Small Business Management* 32: 83–87.
- Akiskal, K., M. Savino, and H. Akiskal. 2005. "Temperament profiles in physicians, lawyers, managers, industrialists, architects, journalists, and artists: A study in psychiatric outpatients". *Journal of Affective Disorders* 85(1-2): 201-206.
- Allen, K. R. 2006. *Launching New Ventures: An Entrepreneurial Approach*. New York: Houghton Mifflin.
- Allison, D.G. 1997. "Coping with stress in the principalship". *Journal of Educational Administration* 35(1): 39–55.
- Altizer, C. 2017. "Mindfulness: performance, wellness or fad?" *Strategic HR Review* 16(1): 24–31.
- Andersson, L. M., R. A. Giacalone, and C. L. Jurkiewicz. 2007. "On the relationship of hope and gratitude to corporate social responsibility". *Journal of Business Ethics*, 70: 401–409.
- Andersson, P. 2008. "Happiness and health: Well-being among the self-employed." *Journal of Socio-Economics* 37(1): 213–236.
- Andrea, H., U., Bültmann, L., Van Amelsvoort, and Y., Kant. 2009. "The incidence of anxiety and depression among employees –the role of psychosocial work characteristics." *Depression and Anxiety* 26: 1040–1048.
- Andrews, G, and T. Slade. 2001. "Interpreting scores on the Kessler Psychological Distress Scale (K10)." *Australian and New Zealand Journal of Public Health* 25: 494–497.
- Ang, J.S. 1991. "Small business uniqueness and the theory of financial management." *Journal of Small Business Finance* 7(1): 1–13.
- Applied Mental Health Research Group. 2013. *Design, implementation, monitoring, and evaluation of mental health and psychosocial assistance programs for trauma survivors in low resource countries: A user's manual for researchers and program implementers*. John Hopkins University, Bloomberg School of Public Health, Baltimore, MD.

- Asian Development Bank; European Union; United Nations; World Bank. 2010. *Khyber Pakhtunkhwa and Federally Administered Tribal Areas: Post-crisis Needs Assessment*. World Bank, Washington, DC. Retrieved from <https://openknowledge.worldbank.org/handle/10986/12705>
- Australian Psychology Society. 2010. "Evidence-based Psychological Interventions in the Treatment of Mental Disorders: A Literature Review." Retrieved from <https://www.psychology.org.au/Assets/Files/Evidence-Based-Psychological-Interventions.pdf>
- Ayala, J.C. and G. Manzano. 2014. "The resilience of the entrepreneur. Influence on the success of the business. A longitudinal analysis." *Journal of Economic Psychology* 42: 126–135.
- Bakker, A.B., E. Demerouti, and W. Verbeke. 2004. "Using the job demands-resources model to predict burnout and performance." *Human Resource Management* 43(1): 83–104.
- Bakker, A. B., M. Westman, and I. J. H. Van Emmerik. 2009. "Advancements in crossover theory." *Journal of Managerial Psychology* 24: 206–219.
- Bandura, A. 1977. "Self-efficacy: Toward a unifying theory of behavioral change." *Psychological Review* 84(2): 191–215.
- Bandura, A. 1997. *Self-Efficacy: The Exercise of Control*. New York: W. H. Freeman.
- Bandura, A. 2008. "An agentic perspective on positive psychology." In *Positive psychology: Exploring the best in people*, edited by S.J. Lopez, 167-196. Westport, CT: Greenwood.
- Ben Tahar, Y. 2014. "Analyse du burnout en entrepreneuriat: une étude empirique sur les dirigeants de PME." Doctoral thesis, Université Montpellier I, France. Retrieved from <https://tel.archives-ouvertes.fr/tel-01202577/document>
- Bernal, G., E. Saez-Santiago. 2006. "Culturally centered psychological interventions." *Journal of Community Psychology* 34(2): 121–132.
- Blattman, C., J.C. Jamison, and M. Sheridan. 2017. "Reducing Crime and Violence: Experimental Evidence from Cognitive Behavioral Therapy in Liberia." *American Economic Review*, 107(4): 1165–1206.
- Blonk, R.W.B., V. Brenninkmeijer, S. E. Lagerveld, and I. L.D. Houtman. 2006. "Return to work: A comparison of two cognitive behavioural interventions in cases of work-related psychological complaints among the self-employed." *Work & Stress* 20(2): 129–144.
- Bloom, N., B. Eifert, A. Mahajan, D. McKenzie, and J. Roberts. 2012. "Does Management Matter? Evidence from India." *The Quarterly Journal of Economics* 128(1): 1–51. <http://doi.org/10.1093/qje/qjs044>

- Boyd, D.P. and D.E. Gumpert. 1983. "Coping with entrepreneurial stress." *Harvard Business Review* 61: 44–64.
- Boye, M. W., and J.W. Jones. 1997. "Organizational culture and employee counterproductivity." In *Antisocial Behavior in Organizations*, edited by R.A. Giacalone and J. Greenberg, 172–184. Thousand Oaks, CA: Sage.
- Bradley, D. E. and J.A. Roberts, 2004. "Self-employment and job satisfaction: Investigating the role of self-efficacy, depression, and seniority." *Journal of Small Business Management* 42(1): 37–58.
- Brown, K. W. and R. M. Ryan. 2003. "The benefits of being present: Mindfulness and its role in psychological well-being." *Journal of Personality and Social Psychology* 84: 822–848.
- Brown, K. W., R. M. Ryan, J.D. Creswell, and C. Niemiec. (in press). "Beyond Me: Mindful responses to social threat." In *The quiet ego: Research and theory on the benefits of transcending egoistic self-interest*, edited by H.A. Waymant and J.J. Bauer. Washington, DC: American Psychological Association.
- Bruck, T., P. Justino, P. Verwimp, A. Avdeenko, and A. Tedesco. 2016. "Measuring violent conflict in micro-level surveys: Current practices and methodological challenges." Policy Research Working Paper 7585, World Bank Group, Washington, DC.
- Brummelhuis, L., J. M. Haar, and M.A. Roche. 2014. "Does family life help to be a better leader? A closer look at crossover processes from leaders to followers." *Personnel Psychology* 67 (4), 917–949.
- Bryant, R.A., A. Schafer, K.S. Dawson, D. Anjuri, C. Mulili, L. Ndogoni, P. Koyiet, M. Sijbrandij, J. Ulate, M. Harper, D. Hadzi-Pavlovic, M. van Ommeren. 2017. "Effectiveness of a brief behavioural intervention on psychological distress among women with a history of gender-based violence in urban Kenya: A randomised clinical trial." *PLoS Med* 14(8).
- Butler, A.C., J.E. Chapman, E.M. Forman, and A.T. Beck. 2006. "The empirical status of cognitive-behavioral therapy: A review of meta-analyses." *Clinical Psychology Review* 26(1): 17–31.
- Buttner, E.H. 1992. "Entrepreneurial stress: is it hazardous to your health?" *Managerial Issues* 4: 223–240.
- Campos, F., M. Frese, M. Goldstein, L. Iacovone, H. Johnson, D. McKenzie, and M. Mensmann. 2017. "Teaching personal initiative beats traditional training in boosting small business in West Africa." *Science*, 357:1287–1290.
- Carpenna, F., S. A. Cole, J. Shapiro, B.H. Zia. 2017. "The ABCs of Financial Education: Experimental Evidence on Attitudes, Behavior, and Cognitive Biases." Policy Research working paper; no. WPS 7413; Impact Evaluation series, World Bank Group, Washington, DC.

- Cartwright S. and C. L. Cooper. 1997. *Managing workplace stress*. Thousand Oaks, California.: Sage Publications.
- Carver, C. S. and M. Scheier. 2003. "Optimism." In *Positive Psychological Assessment: A Handbook of Models and Measures*, edited by S.J. Lopez and C.R. Snyder. Washington D. C.: American Psychological Association.
- Castro, F. G., M. Barrera, Jr., and L. K. Holleran Steiker. 2010. "Issues and challenges in the design of culturally adapted evidence-based interventions." *Annual Review of Clinical Psychology*, 6: 213-239.
- Chay, Y.W. 1993. "Social support, individual differences and well being: A study of small business entrepreneurs and employees." *Journal of Occupational and Organizational Psychology* 66(4): 285–302.
- Chisholm, D., and S. Saxena. 2012. "Cost effectiveness of strategies to combat neuropsychiatric conditions in sub-Saharan Africa and South East Asia: Mathematical modeling study." *BMJ* 344.
- Cicchetti, D. 2010. "Resilience under conditions of extreme stress: A multilevel perspective." *World Psychiatry* 9(3): 145–154.
- Cocker, F., A. Martin, J. Scott, A. Venn, and K. Sanderson. 2013. "Psychological distress and related work attendance among small-to-medium enterprise owner/managers: Literature review and research agenda." *International Journal of Mental Health Promotion* 10: 5062–5082.
- Commission on Macroeconomics and Health. 2001. *Macroeconomics and Health: Investing in Health for Economic Development*. Geneva: World Health Organization (WHO).
- Cooper, A. C., C. Y. Woo, and W.C. Dunkelberg. 1988. "Entrepreneurs' perceived chances for success." *Journal of Business Venturing* 3: 97–108.
- Craigie, M. A., and P. Nathan. 2009. "A nonrandomized effectiveness comparison of broad-spectrum group CBT to individual CBT for depressed outpatients in a community mental health setting." *Behavior Therapy* 40, 302–314.
- David, D., A. Szentagotai, E. Kallay, and B. Macavei. 2005. "A Synopsis of Rational-Emotive Behavior Therapy (REBT): Fundamental and Applied Research." *Journal of Rational-Emotive & Cognitive-Behavior Therapy* 23(3): 175-221.
- Dawson, K.S., R. A. Bryant, M. Harper, A. K. Tay, A. Rahman, A. Schafer, and M. van Ommeren. 2015. "Problem Management Plus (PM+): A WHO transdiagnostic psychological intervention for common mental health problems." *World Psychiatry* 14(3): 354–357.

- Demerouti, E., A. Bakker, and M. Leiter. 2014. "Burnout and Job Performance: The Moderating Role of Selection, Optimization, and Compensation Strategies." *Journal of Occupational Health Psychology* 19: 96–107.
- Dewe P.J. and D.E. Guest. 1990. "Methods of coping with stress at work: a conceptual analysis and empirical study of measurement issues." *Journal of Organizational Behavior* 11(2): 135–150.
- Dijkhuizen, J., M. van Veldhoven, and R. Schalk. 2016. "Four Types of Well-being among Entrepreneurs and Their Relationships with Business Performance." *Journal of Entrepreneurship* 25(2): 184-210.
- Dimic, N. and V. Orlov. 2014. "Entrepreneurial tendencies among people with ADHD." *International Review of Entrepreneurship* 13(3): 187-204.
- Dolinsky, A.L. and R. K. Caputo. 2003 "Health and female self-employment." *Journal of Small Business Management* 41(3):233–241.
- Eden, D. 1975. "Organizational membership vs. self-employment: Another blow to the American dream." *Organizational Behavior and Human Performance* 13(1): 79–94.
- Edwards J.R. 1992. "A cybernetic theory of stress, coping and wellbeing in organisations." *Academy of Management Review* 17(2):238–274.
- Egana del Sol, P.A. 2017. "Affective Neuroscience meets Entrepreneurship: Assessing the Role of Emotional Regulation on Late Stage Intervention to Foster Entrepreneurship." Retrieved from <http://pabloeganadelsol.com/research-2/>.
- Ellis, A. 2002. "Rational Emotive Behavior Therapy." *Encyclopedia of Psychotherapy* 2: 483–487.
- Fava, G. A., C. Ruini, C. Rafanelli, L. Finos, S. Conti, and S. Grandi. 2004. "Six-year outcome of cognitive behavior therapy for prevention of recurrent depression." *American Journal of Psychiatry* 161: 1872 –1876.
- Feldman, D.C. and M.C. Bolino. 2000. "Career patterns of the self-employed: career motivations and career outcomes." *Journal of Small Business Management* 38(3): 53–67.
- Fernet, C., O. Torres, S. Austin, and J. St-Pierre. 2016. "The psychological costs of owning and managing an SME: Linking job stressors, occupational loneliness, entrepreneurial orientation, and burnout." *Burnout Research* 3: 45–53.
- Field, T. A., E.T. Beeson, and L.K. Jones. 2015. "The new ABCs: A counselor's guide to neuroscience-informed cognitive-behavior therapy." *Journal of Mental Health Counseling* 37: 206–220.
- Fox, S., and P.E. Spector. 1999. "A model of work frustration—aggression." *Journal of Organizational Behavior* 20: 915–931.

- Fox, S., P.E. Spector, and D. Miles. 2001. "Counterproductive work behavior (CWB) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions." *Journal of Vocational Behavior* 59: 291–309.
- Freeman, D. and J. Freeman. 2015. "New study shows mindfulness therapy can be as effective as antidepressants." *The Guardian*. April 21.
- Freire, P. 1968. *Pedagogy of the Oppressed*. New York: Herder and Herder.
- Frese, M., M. M. Gielnik, and M. Mensmann. 2016. "Psychological Training for Entrepreneurs to Take Action: Contributing to Poverty Reduction in Developing Countries." *Current Directions in Psychological Science*, 25(3): 196–202.
- Gadit, A. A. M. 2007. "Mental health model: Comparison between a developed and a developing country." *Journal of Medicine* 1(1): 1-7.
- Ganster, D.C. 2005. "Response: Executive job demands: Suggestions from a stress and decision-making perspective." *Academy of Management Review* 30(3), 492–502.
- Gilboa, S., A. Shirom, Y. Fried, and C. Cooper. 2008. "A meta-analysis of work demand stressors and job performance: Examining main and moderating effects." *Personnel Psychology* 61(2): 227–271.
- Global Burden of Disease Study. 2015. The Lancet. Retrieved at <http://www.thelancet.com/gbd/2015>.
- Good, B., M. DelVecchio Good, J. Grayman, and M. Lakoma. 2006. *Psychosocial Needs Assessment of Communities Affected by the Conflict in the Districts of Pidie, Bireuen and Aceh Utara*. Jakarta, Indonesia: International Organization for Migration (IOM).
- Goodman, R.N. 2008. "Performance under pressure: Examination of relevant neurobiological and genetic influence". Doctoral dissertation. University of Maryland, College Park.
- Grant, S. and K. Ferris. 2012. "Identifying sources of occupational stress in entrepreneurs for measurement." *International Journal of Entrepreneurial Venturing* 4: 351–373.
- Gumpert, D.E. and D. P. Boyd. 1984. "The loneliness of the small business owner." *Harvard Business Review* 62: 18–24.
- Hall, K. and L.K. Savery. 1986. "Tight rein, more stress." *Harvard Business Review* 23(10): 1162–1164.
- Hamdani, S.U., A. Zainab, M. Sijbrandij, H. Nazir, A. Masood, P. Akhtar, H. Amin, R. A. Bryant, K. Dawson, M. van Ommeren, A. Rahman, and F. A. Minhas. 2017. "Problem Management Plus (PM+) in the management of common mental disorders in a specialized mental

- healthcare facility in Pakistan: Study protocol for a randomized controlled trial". *International Journal of Mental Health Systems* 11(40).
- Harley Therapy. 2014. "CBT vs MBCT- What is the Difference?" *Harley Therapy Counselling Blog*. January 16. Retrieved December 4, 2017 from: <https://www.harleytherapy.co.uk/counselling/cbt-mbct-difference.htm>
- Harms, P.D., M. Crede, M. Tynan, M. Leon, and W. Jeung. 2017. "Leadership and stress: A meta-analytic review." *The Leadership Quarterly* 28 (1): 178–194.
- Harris, J.A., R. Saltstone, and M. Fraboni. 1999. "An Evaluation of the job stress questionnaire with a sample of entrepreneurs." *Journal of Business Psychology* 13(3): 447–455.
- Heller, S. B., A. K. Shah, J. Guryan, J. Ludwig, S. Mullainathan, H. A. Pollack. 2017. "Thinking, Fast and Slow? Some Field Experiments to Reduce Crime and Dropout in Chicago." *Quarterly Journal of Economics* 132(1): 1–54.
- Hmieleski, K. M. and J. C. Carr. 2007. "The Relationship Between Entrepreneur Psychological Capital and Well-Being." *Frontiers of Entrepreneurship Research* 27(5): insert page numbers.
- Hobfoll, S. E. 2001. "The influence of culture, community: and the nested self in the stress process: Advancing conservation of resources theory." *Applied Psychology: An International Review* 50: 337–370.
- Horton, T. V., and J. L. Wallander. 2001. "Hope and social support as resilience factors against psychological distress of mothers who care for children with chronic physical conditions." *Rehabilitation Psychology* 46(4): 382–399.
- Ideas 42 & UChicago Crime Lab. CBT 2.0 User's Manual. Retrieved December 4, 2017, from <http://www.ideas42.org/wp-content/uploads/2017/01/CBTUsersManual.pdf>
- _____. CBT 2.0 Curriculum. Retrieved December 4, 2017, from <http://www.ideas42.org/wp-content/uploads/2017/01/CBTCurriculum.pdf>
- Iribarren, J., P. Prolo, N. Neagos, and F. Chiappelli. 2005. "Post-Traumatic Stress Disorder: Evidence-Based Research for the Third Millennium." *Evidence-Based Complementary and Alternative Medicine* 2 (4): 503–512.
- Jacelon, C.S. 1997. "The trait and process of resilience." *Journal of Advanced Nursing* 25(1):123–129.
- Jamal, M. 1997. "Job Stress, Satisfaction, and Mental Health: An Empirical Examination of Self-Employed and Non-Self-Employed Canadians." *Journal of Small Business Management* 35 (4): 48-57

- Jamal, M. and J. Badawi. 1995. "Job Stress and Quality of Working Life of Self-Employed Immigrants: A Study in Workforce Diversity." *Journal of Small Business & Entrepreneurship* 12: 55–63.
- Jex, S.M. 1998. *Stress and Job Performance: Theory, Research and Implications for Managerial Practice*. Thousand Oaks: Sage.
- Johnson D. 1999. "Stress among graduates working in the SME sector." *Journal of Management Psychology* 6(5): 17–21.
- _____. 1995. "Stress and stress management among owner-managers of small and medium-sized enterprises". *Employee Counselling Today* 7:14–20.
- Johnson, S. K. 2008. "I second that emotion: Effects of emotional contagion and affect at work on leader and follower outcomes." *The Leadership Quarterly* 19: 1–19.
- Kabat-Zinn J. 1991. *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain and illness*. New York, NY: Delta.
- Kahn, R., L. Wolfe, A. Quinn, J.D. Snoek, and R. Rosenthal. 1964. *Organizational stress: studies in role conflict and role ambiguity*. New York: Wiley.
- Kangas, M. 2014. "The Evolution of Mindfulness-based Cognitive Therapy." *Australian Psychologist* 49(5): 280–282.
- Kariv, D. 2008. "The Relationship between Stress and Business Performance among Men and Women Entrepreneurs." *Journal of Small Business & Entrepreneurship* 21(4): 449–476.
- Kessler, D., G. Lewis, S. Kaur, N. Wiles, M. King, S. Weich, D. J. Sharp, R. Araya, S. Hollinghurst, and T.K. Peters. 2009. "Therapist-delivered internet psychotherapy for depression in primary care: A randomised controlled trial". *The Lancet* 374: 628–634.
- Kets de Vries, M.R.F. 1985. "The dark side of entrepreneurship." *Harvard Business Review* 63(6): 160–167.
- Khalily, M. T. 2011. "Mental health problems in Pakistani society as a consequence of violence and trauma: A case for better integration of care." *International Journal of Integrated Care* 11: 1
- Khan, M., S.U. Hamdani, A. Chiumento, K. Dawson, R. A. Bryant, M. Sijbrandij, H. Nazir, P. Akhtar, A. Masood, D. Wang, E. Wang, I. Uddin, M. V. Ommeren, and A. Rahman. 2017. "Evaluating feasibility and acceptability of a group WHO trans-diagnostic intervention for women with common mental disorders in rural Pakistan: A cluster randomised controlled feasibility trial." *Epidemiology and Psychiatric Sciences*:1–11.

- Kim, J.J., and D. M. Diamond. 2002. "The stressed hippocampus, synaptic plasticity and lost memories." *Nature Reviews Neuroscience* 3(6): 453–462.
- Kirkcaldy, B. and A. Furnham. 1999. "Stress coping styles among German managers." *Journal of Workplace Learning* 11(1): 22–26.
- Kivimaki M, K. Lindstrom. 1995. "Effects of private self-consciousness and control on the occupational stress-strain relationship." *Stress Medicine* 11(1): 7–16.
- Kuyken W., S. Byford, R.S. Taylor, E. Watkins, E. Holden, K. White, B. Barrett, R. Byng, A. Evans, E. Mullan, J.D. Teasdale. 2008. "Mindfulness-based cognitive therapy to prevent relapse in recurrent depression." *Journal of Consulting and Clinical Psychology* 76: 966–78.
- Langer, E. 1989. *Mindfulness* A Merloyd Lawrence Book. Da Capo Press.
- Latack, J. C. 1981. "Person/role conflict: Holland's model extended to role-stress research, stress management, and career development." *Academy of Management Review* 6: 89–103.
- Lazarus, R.S. 1966. *Psychological Stress and the Coping Process*. New York: McGraw-Hill.
- Lewin-Epstein, N. and E. Yuchtman-Yaar. 1991. "Health risks of self-employment." *Work and Occupations* 18: 291–312.
- Lopez, S., C. Snyder, and J. Pedrotti. 2003. "Hope: Many definitions, many measures." In *Positive psychological assessment: A handbook of models and measures*, edited by S. Lopez and C. Snyder, 91- 106. Washington DC: American Psychological Association.
- Luthans, F. and C. M. Youssef. 2004. "Human, social, and now positive psychological capital management: Investing in people for competitive advantage." *Organizational Dynamics* 33(2): 143–160.
- Luthans, F., C. M. Youssef, and B. J. Avolio. 2007. *Psychological Capital: Developing the Human Competitive Edge*. Oxford, England: Oxford University Press.
- Ma, H., Teasdale, J. 2004. "Mindfulness-based cognitive therapy for depression: Replication and exploration of differential relapse prevention effects." *Journal of Consulting and Clinical Psychology* 72: 31–40.
- Markman, G. D., R. A. Baron, and D.B. Balkin. 2005. "Are perseverance and self-efficacy costless? Assessing entrepreneurs' regretful thinking." *Journal of Organizational Behavior* 26(1): 1–19.
- Martin, B. *In-Depth: Cognitive Behavioral Therapy*. Psych Central. Retrieved December 4, 2017, from <https://psychcentral.com/lib/in-depth-cognitive-behavioral-therapy/>.

- Masten, A. S. 2001. "Ordinary magic: Resilience processes in development." *American Psychologist* 56: 227–238.
- Mataix, D., L. Fernandez de la Cruz, K. Isomura, M. Anson, C. Turner, B. Monzani, J. Cadman, L. Bowyer, I. Heyman, D. Veale, G. Krebs. 2015. "A Pilot Randomized Controlled Trial of Cognitive-Behavioral Therapy for Adolescents with Body Dysmorphic Disorder." *Journal of the American Academy of Child and Adolescent Psychiatry* 54(11): 895–904.
- Mazurana, D., A. MARshak, J. Hilton, R. Gordon, T. Atim. 2014. "Surveying livelihoods, service delivery and governance: baseline evidence from Uganda." *Secure Livelihoods Research Consortium*. Working Paper 12.
- McEnvoy P.M., P. Nathan and P.J. Norton. 2009. "Efficacy of transdiagnostic treatments: a review of published outcome studies and future research directions." *Journal of Cognitive Psychotherapy* 23: 20–33.
- McFarlane, A. C. 2010. "The long-term costs of traumatic stress: intertwined physical and psychological consequences." *World Psychiatry* 9(1): 3–10.
- McGuire, J.T. and M. M. Botvinick. 2010 "Prefrontal cortex, cognitive control, and the registration of decision costs." *PNAS*, 107(17): 7922–7926.
- McKenzie, D. and C. Woodruff. 2012. "What are we learning for business training and entrepreneurship evaluations around the Developing World?" Policy Research Working Paper 6202, World Bank, Washington, DC.
- Meglino, B.M. 1977. "The Stress-Performance Controversy." *MSU Business Topics* 25(4): 53–59.
- Melchior, M., A. Caspi, B. J. Milne, A. Danese. R. Poulton, and T. E. Moffitt. 2007. "Work stress precipitates depression and anxiety in young, working women and men." *Psychological Medicine* 37: 1119–1129.
- Metcalf, C.A. and S. Dimidjian. 2014. "Extensions and Mechanisms of Mindfulness-based Cognitive Therapy: A Review of the Evidence." *Australian Psychologist* 49: 271–279.
- Miles, D. E., W.C. Borman, P.E. Spector, and S. Fox. 2002. "Building an integrative model of extra role work behaviors: A comparison of counterproductive work behavior with organizational citizenship behavior." *International Journal of Selection and Assessment* 10(1/2): 51–57.
- Mohr, D. C., S. L. Hart, L. Julian, C. Catledge, L. Honos-Webb, L. Vella, and E. T. Tasch. 2005. "Telephone-administered psychotherapy for depression." *Archives of General Psychiatry* 62:1007–1014.
- Monsell, S. 2003. "Task switching." *Trends in Cognitive Sciences* 7(3):134–140.

- Murray T.J. and D. Forbes. 1986. "Where have all the middle managers gone?" *Dun's Business Month* 31–34.
- Myhr, G. and K. Payne. 2006. "Cost-Effectiveness of Cognitive-Behavioural Therapy for Mental Disorders: Implications for Public Health Care Funding Policy in Canada." *Canadian Journal of Psychiatry* 51(10): 662-670.
- Nielsen, K., and K. Daniels. 2012. "Enhancing team leaders' wellbeing states and challenge experiences during organizational change: A randomized, controlled study." *Human Relations* 65: 1207–1231.
- Naughton, T.J. 1987. "Quality of working life and the self-employed manager." *American Journal of Small Business* 12(2): 33–40.
- Oei, T.P.S. and G. Dingle. 2008. "The effectiveness of group cognitive behavior therapy for unipolar depressive disorders". *Journal of Affective Disorder* 107: 5–21.
- Ogbuanya, T.C., C. Eseadi, C.T. Orji, M.O. Ede, I.B. Ohanu, J. Bakare. 2017. "Effects of rational emotive occupational health therapy intervention on the perceptions of organizational climate and occupational risk management practices among electronics technology employees in Nigeria." *Medicine (Baltimore)* 96 (18).
- Ong, A.D., L. Edwards, and C.S. Bergeman. 2006. "Hope as a source of resilience in later adulthood." *Personality and Individual Differences* 41(7): 1263–1273.
- Ortqvist, D., M. Drnovsek, and J. Wincent. 2007. "Entrepreneurs coping with challenging role expectations." *Baltic Journal of Management* 2(3): 288–304.
- Parasuraman, S., Y. S. Purohit, V. M. Godshalk, N. J. Beutell. 1996. "Work and family variables, entrepreneurial career success and psychological well being." *Journal of Vocational Behavior* 48(3): 275–300.
- Parasuraman, S., and C.A. Simmers. 2001. "Type of employment, work-family conflict and wellbeing: A comparative study." *Journal of Organizational Behavior* 22(5): 551–568.
- Phillips, J. M. and S.M. Gully. 1997. "Role of goal orientation, ability, need for achievement, and locus of control in the self-efficacy and goal-setting process." *Journal of Applied Psychology* 82(5): 792–802.
- Piet, J., and E. Hougaard. 2011. "The effect of mindfulness-based cognitive therapy for prevention of relapse in recurrent major depressive disorder: A systematic review and meta-analysis." *Clinical Psychology Review*, 31(6): 1032–1040.
- Prottas, D.J. and C. A. Thompson. 2006. "Stress, satisfaction, and the work-family inter-face: a comparison of self-employed business owners, independents, and organizational employees." *Journal of Occupational Health Psychology* 11(4): 366–378.

- Psychology Today. *Rational Emotive Behavior Therapy*. Retrieved December 4, 2017, from <https://www.psychologytoday.com/therapy-types/rational-emotive-behavior-therapy>
- Quick, J. C. 1998. "Introduction to the measurement of stress at work." *Journal of Occupational Health Psychology* 3(4): 291–293.
- Quick J.C. and J.D. Quick. 1984. *Organizational stress and preventive management*. New York: McGraw-Hill.
- Rahim, A. 1996. "Stress, strain, and their moderators: an empirical comparison of entrepreneurs and managers." *Journal of Small Business Management* 34(1): 46–58.
- Rahman, A., A. Malik, S. Sikanders, C. Roberts, F. Creed. 2008. "Cognitive behaviour therapy-based intervention by community health workers for mothers with depression and their infants in rural Pakistan: A cluster-randomised controlled trial". *The Lancet* 372(9642), 902–909.
- Rauch, A. and M. Frese. 2007. "Born to be an entrepreneur? Revisiting the personality approach to entrepreneurship." In *The Psychology of Entrepreneurship*, edited by J.R. Baum, M. Frese, and R.A. Baron, 41–66. Mahwah, NJ: Erlbaum.
- Roberts, S.J., L. L. Scherer, and C.J. Bowyer. 2011. "Job Stress and Incivility: What Role Does Psychological Capital Play?" *Journal of Leadership and Organizational Studies* XX(X) 1–10.
- Robertson, D. 2004. "Stress and the entrepreneur." *Bibby Financial Services*.
- Robinson, S., N. Lockett, A. Bicknell, J. Francis-Smythe, and J. Arthur. 2010. "Knowledge transfer: De-constructing the entrepreneurial academic." *International Journal of Entrepreneurial Behavior and Research* 16: 485–501.
- Roche, Maree; Jarrod M. Haar, and Fred Luthans. 2014. "The Role of Mindfulness and Psychological Capital on the Well-Being of Leaders" Management Department Faculty Publications No. 126.
- Rockmore, M. 2016. "The Cost of Fear: The Welfare Effect of the Risk of Violence in Northern Uganda." Policy Research Working Paper 7642, World Bank, Washington DC.
- Rokach, A. 2014. "Leadership and Loneliness." *International Journal of Leadership and Change* 2(1): 46-59
- Rosenberg, M. 1965. *Society and the Adolescent Self-image*. Princeton, NJ: Princeton University Press.
- Rutter, M. 2012. "Resilience as a dynamic concept." *Development and Psychopathology* 24(2): 335–344.

- Rythonen, M.H. and T. Strandvik. 2005. "Stress in business relationships." *Journal of Business and Industrial Marketing* 20(1): 12–22.
- Saeed, F. and F. A. Minhas. 2001. "Community psychiatry in developing countries – A misnomer?" *The Psychiatrist* 25:226–227.
- Sava, F.A., B. T. Yates, A. Szentagotai, and D. David. 2009. "Cost-effectiveness and cost-utility of cognitive therapy, rational emotive behavioral therapy, and fluoxetine (Prozac) in treating depression: A randomized clinical trial." *Journal of Clinical Psychology* 65(1): 36–52.
- Savoca, E., and R. Rosenheck. 2000. "The civilian labor market experiences of Vietnam-era veterans: The influence of psychiatric disorders." *Journal of Mental Health Policy Economics* 3(4):199–207.
- Schuler R.S. 1982. "An integrative transactional process model of stress in organizations." *Journal of Occupational Behavior* 3(1): 5–19.
- Segal, Z.V., J. M. G. Williams, and J.D. Teasdale. 2012. *Mindfulness-Based Cognitive Therapy for Depression, Second Edition*. New York, NY: The Guilford Press.
- Selye, H. 1974. *Stress Without Distress*. Philadelphia: J.B. Lippincott Company.
- Shepherd, D. 2003. "Learning from business failure: propositions of grief recovery for the self-employed." *Academy of Management* 28(2):318–328.
- Shepherd, C. D., G. Marchisio, S. C. Morrish, J. H. Deacon, M. P. Miles. 2010. "Entrepreneurial burnout: exploring antecedents: dimensions and outcomes." *Journal of Research in Marketing and Entrepreneurship* 12:71–79.
- Snyder, C. R. 2000. *Handbook of Hope*. San Diego, CA: Academic Press.
- Snyder, C. R., J. Cheavens, and S.C. Sympson. 1997. "Hope: An individual motive for social commerce." *Group Dynamics: Theory, Research, and Practice*, 1:107–118.
- Speakman, J, and A. Rysova. 2015. *The Small Entrepreneur in Fragile and Conflict-Affected Situations. Directions in Development--Private Sector Development*. World Bank, Washington, DC. © World Bank.
- Spears, D. 2011. "Economic Decision-Making in Poverty Depletes Behavioral Control." *The B.E. Journal of Economic Analysis and Policy* 11(1):1–44.
- Spector, A., G. Charlesworth, M. King, M. Lattimer, S. Sadek, L. Marston, A. Rehill, J. Hoe, A. Qazi, M. Knapp, M. Orrell. 2014. "Cognitive Behavioural therapy (CBT) for anxiety in dementia: A pilot randomized controlled trial." *British Journal of Psychiatry* volume and issue numbers? :1–27.

- Stoner, C.R., R. I. Hartman, and R. Arora. 1990. "Work-home conflict in female owners of small businesses: An exploratory study." *Journal of Small Business Management* 28(1), 30–38.
- Strauss C., K. Cavanagh, A. Oliver A. and D. Pettman. 2014. "Mindfulness-based interventions for people diagnosed with a current episode of an anxiety or depressive disorder: A meta-analysis of randomised controlled trials." *PLoS ONE* 9(4).
- Steel, Z., T. Chet, D. Silove, C. Marnane, R.A. Bryant, and M. van Ommeren. 2009. Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: a systematic review and meta-analysis. *JAMA* 302(4):537–549.
- Strohmeier, H. and W.F. Scholte. 2015. "Trauma-related mental health problems among national humanitarian staff: A systematic review of the literature." *European Journal of Psychotraumatology* 6:1.
- Sullivan, S.E. and R.S. Bhagat. 1992. "Organizational stress, job satisfaction and job performance: Where do we go from here?" *Journal of Management* 18(2): 353–374.
- Sy, T., S. Côté, and R. Saavedra. 2005. "The contagious leader: Impact of the leader's mood on the mood of group members, group affective tone, and group processes." *Journal of Applied Psychology* 90:295–305.
- Tahar, Y.B. (Unpublished). Entrepreneurial Stressors. University Montpellier.
- Tahir, U. 2016. "Entrepreneurial Stress in SMEs." *Journal of Resource Development and Management*, 18:54-61
- Teasdale, J., Z.V. Segal, J. M. Williams, V.A. Ridgeway, J. M. Soulsby, and M. A. Lau. 2000. "Prevention of relapse/recurrence in major depression by mindfulness-based cognitive therapy". *Journal of Consulting and Clinical Psychology* 68:615–623.
- Tetrick, L.E., K.J. Slack, N. Da Silva, R. R. Sinclair. 2000. "A comparison of the stress-strain process for business owners and nonowners: differences in job demands, emotional exhaustion, satisfaction, and social support." *Journal of Occupational Health Psychology* 5:464–476.
- Thomas A., E. T. Beeson, and L. K. Jonez. 2015. "The New ABCs: A Practitioner's Guide to Neuroscience-Informed Cognitive-Behavior Therapy." *Journal of Mental Health Counseling* 37(3): 206–220.
- Tol, W.A., I. H. Komproe, M. J. Jordans, A. Vallipuram, H. Sipsma, S. Sivayokan, R. D. Macy, and J. T. De Jong. 2012. "Outcomes and moderators of a preventive school-based mental health intervention for children affected by war in Sri Lanka: A cluster randomized trial." *World Psychiatry* 11(2): 114–122.

- Tol, W. A., C. Barbui, A. Galappatti, D. Silove, T. S. Betancourt, R. Souza, A. Golaz, M. van Ommeren. 2014. "Mental health and psychosocial support in humanitarian settings: Linking practice and research." *The Lancet* 378(9802): 1581–1591.
- Torres, O. 2012. "Premiers résultats d'une étude épidémiologique sur la santé des dirigeants de PME." [First results of an epidemiological study on health of SME managers]. In *La santé du dirigeant: De la souffrance patronale à l'entrepreneuriat salubre*, edited by O. Torres, 191–209. Bruxelles: De Boeck.
- Totterdell, P., S. Wood, and T. Wall. 2006. "An intra-individual test of the demands-control model: A weekly diary study of psychological strain in portfolio workers." *Journal of Occupational and Organizational Psychology* 79: 63–85.
- Tucker, M. and T.P.S. Oei. 2007. "Is group more cost effective than individual cognitive behaviour therapy? The evidence is not solid yet." *Behavior and Cognitive Psychotherapy* 35:77–91.
- Tucker, J.S., R. R. Sinclair, C. D. Mohr, J. L. Thomas, A. D. Salvi, and A. B. Adler. 2009. "Stress and counterproductive work behavior: Multiple relationships between demands, control, and soldier indiscipline over time." *Journal of Occupational Health Psychology* 14 (3): 257–271.
- Tugade, M. M. and B. L. Fredrickson. 2004. "Resilient individuals use positive emotions to bounce back from negative emotional experiences." *Journal of Personality and Social Psychology*, 86(2): 320–333.
- Uy, M.A., M.D. Foo, and Z. Song. 2013. "Joint effects of prior start-up experience and coping strategies on entrepreneurs' psychological well-being." *Journal of Business Venturing* 28(5): 583–597.
- Vasumathi, A., S. Govindarajalu, E. K. Anuratha and R. Amudha. 2003. "Stress and coping styles of an entrepreneur: an empirical study." *Journal of Management Research* 3(1): 43–51.
- Verheul, I., J. Block, K. Burmeister-Lamp, R. Thurik, H. Tiemeier, R. Turturea. 2013. "ADHD-like behavior and entrepreneurial intentions." *Small Business Economics* 45(1): 1–49.
- Vohs, K. D., R. F. Baumeister, B. J. Schmeichel, J. M. Twenge, N. M. Nelson, and D. M. Tice. 2008. "Making choices impairs subsequent self-control: A limited resource account of decision making, self-regulation, and active initiative." *Journal of Personality and Social Psychology* 94: 883– 898.
- Wang, L., L. Prieto, and K. Hinrichs. 2010. "Direct and indirect effects of individual and environmental factors on motivation for self-employment." *Journal of Developmental Entrepreneurship* 15(4):481–502.
- Weinstein, N., K.W. Brown, and R.M. Ryan. 2009. "A multi-method examination of the effects of mindfulness on stress attribution, coping, and emotional well-being." *Journal of Research in Personality* 43: 374–385.

- Weinstein, N. and R.M. Ryan. 2011. "A motivational approach to stress response and adaptation." *Stress and Health* 1:4–17
- Westerlund, H., T. Theorell, and L. Alfredsson. 2004. "Organizational instability and cardiovascular risk factors in white collar employees." *European Journal of Public Health* 14(1):37–42.
- Wincent, J. and D. Örtqvist. 2009. "A comprehensive model of entrepreneur role stress antecedents and consequences." *Journal of Business and Psychology* 24: 225–243.
- Winnebeck, E, M. Fissler, M. Gärtner, P. Chadwick, and T. Barnhofer. 2017. "Brief training in mindfulness meditation reduces symptoms in patients with a chronic or recurrent lifetime history of depression: A randomized controlled study." *Behaviour Research and Therapy*, 99:124–130.
- The World Bank. 2018. *Problem Management Plus (PM+) for SME Entrepreneurs in KPK and FATA. Training Needs Assessment Report* [forthcoming]. Washington, DC: World Bank.
- _____. 2017. *Impact Evaluation of a Large-Scale Female Entrepreneurship Pilot in Mexico*. Washington, DC: The World Bank.
- _____. 2017. "Project Appraisal Document: Economic Revitalization of Khyber Pakhtunkhwa and Federally Administered Tribal Areas Project (ERKF)." Washington, DC: World Bank Group. Retrieved from <http://documents.worldbank.org/curated/en/127831493738956790/pdf/PAD2047-PAD-OUO-9-Project-Appraisal-Document-P160445-2017-03-28-13-32.pdf>
- _____. 2014. "Pakistan - Country Partnership Strategy for the Period FY2015-19." Washington, DC: World Bank Group. Retrieved from: <http://documents.worldbank.org/curated/en/886791468083329310/Pakistan-Country-partnership-strategy-for-the-period-FY2015-19>
- _____. 2011. *World Development Report 2011: Conflict, Security and Development*. Washington, DC: The World Bank.
- _____. "Small and Medium Enterprises (SMEs) Finance. Improving SME's access to finance and finding innovative solutions to unlock sources of capital." Washington, DC: World Bank.
- World Health Organization. 2016. "Problem Management Plus (PM+): Individual psychological help for adults impaired by distress in communities exposed to adversity." (Generic field-trial version 1.0). Geneva: WHO.
- _____. 2004. "Quality of Life (WHOQOL)-BREF." Geneva: WHO. Retrieved at http://www.who.int/substance_abuse/research_tools/en/english_whoqol.pdf.
- Yerkes, R.M. and J.D. Dodson. 1908. "The Relation of Strength of Stimulus to Rapidity of Habit Formation." *Journal of Comparative Neurology and Psychology* 18:459–482.

Annex 1: External Environment Stressors in KP/FATA in Pakistan

As a mostly stable country, Pakistan has a few pockets where entrepreneurs have faced significant challenges due to conflict and violence. The provinces of KP and the FATA region are located in the country's North-West, and are home to an estimated 30 million people, or 16 percent of Pakistan's total population (World Bank 2017).

This area faced severe crises due to the activities of militants, particularly in 2007-2009, and mostly along the border with Afghanistan (Khalily 2011). The conflict has exacerbated the vulnerability of the region, which is already one of the poorest regions of Pakistan. KP and FATA lag other provinces across a wide range of social and economic indicators, and the gap is even more pronounced when viewed through a gender lens.¹¹ The militants destroyed the livelihoods of locals, caused large-scale displacement, damaged infrastructure, and worsened the region's business connectivity with the rest of the country. During this time, 600,000 people were displaced from FATA.

Violent conflict has had a devastating effect on the economic activity and social cohesion of KP/FATA.¹² Conflict implies smaller markets, fewer opportunities for profitable investments and arbitrage, more uncertainty, lower trust in business relations and higher transaction costs (Bruck and others 2016). Almost 245,246 temporarily displaced families—or 72 percent of the total number of families (338,270)—have recently returned to their agencies/towns in FATA.¹³ Entrepreneurship among SMEs is expected to be the major channel through which the restoration of livelihoods will occur, including firms that provide basic services, such as electricity, education, and health services. Due to the crisis, firms have faced an unprecedented loss of buildings, machinery, equipment, and stocks that have been damaged.

Sources: World Bank Group Rapid Needs Assessment in KP/FATA (2018). Forthcoming; World Bank Group Country Partnership Strategy for Pakistan (2015-2019); Field interviews (2018).

¹¹ Illiteracy levels are as high as 97 percent for women in FATA, compared to 71 percent for men; the comparative figures for KP are 68 percent for women and 33 percent for men.

¹² See Naude (2007, 2008, 2009).

¹³ Website of FATA Disaster Management Authority <http://www.fdma.gov.pk/tdps-statistics-as-of-22-03-2016>.