# Entrepreneurs under stress: Does gender matter in the relationship between stress and effectiveness?

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**Abstract**

This innovative and exploratory research attempts to assess the differences in entrepreneurial effectiveness in businesses owned by men (MOB) and by women (WOB) while incorporating perceptions of positive and negative stress. The entrepreneurship literature has overlooked these topics in its investigations on gendered entrepreneurial business effectiveness. Analyses of a national sample of 190 Israeli independent entrepreneurs, produced several significant results: stress experienced by men and women entrepreneurs significantly differs in its negative aspect, but not in its positive aspect; social support had a significant role in men's and women's perceived stress, with both experiencing lower negative perceived stress while obtaining social support; job security emerged as significant only for men entrepreneurs in increasing their positive stress; and significant effects of perceived stress emerged on the two indicators of the business effectiveness investigated in this study, i.e., business profitability and growth in clients' diversity. Implications on the gender differences are discussed.

## *Introduction*

The present research has two interconnected objectives: exploration of the stress faced by, men and women entrepreneurs, and an assessment of differences in the effectiveness of businesses owned by men (MOB) and by women (WOB) that incorporate the effects of stress. The purpose of this combined objective is to develop a comprehensive model that integrates macro- and micro-oriented measures, in order to obtain an inclusive overview on the differences in several effectiveness measures of MOB as compared with WOB. The multiple findings indicating that WOB are less effective than MOB (Aldrich, 1989; Boden & Nucci, 2000; Cuba, Decenzo & Anish, 1983) require deeper exploration. This can be done by probing determinants associated with business effectiveness, a subject still neglected in entrepreneurship research. One such determinant is stress, whose relevance to the assessment of effectiveness in terms of customer loyalty, profitability, productivity, etc. is still overlooked. Moreover, although stress has been found to affect employees' and managers' performance in smaller businesses (Teratanavat & Kleiner, 2001; Treven & Potocan, 2005), and should therefore be a principle element in the examination of business-unit effectiveness, it has scarcely been explored to date. Finally, while gender-related psychological qualities of entrepreneurs were found to affect both the motivation to start a business and to run it, the impact of these factors on ongoing management and efficiency has not been sufficiently explored.

To fill in these gaps, the proposed research intends to explore gender differences in perceived positive and negative stresses and their impact, along with the objective stressors that men and women entrepreneurs face, and the influence of both on the effectiveness measures of MOB and WOB.

## Theoretical Background

In the last two decades many researchers have investigated the relationship between gender and entrepreneurship performance. The research has focused on a wide range of issues at the macro level of analysis, but at the micro level only a relatively limited number of such variables as entrepreneurs' traits or qualities have been considered (Baron, 1998; Cromie, 1994), and their impact on business effectiveness examined (Baron, 1998; Cromie, 1994). This is especially noticeable in respect to MOB and WOB effectiveness (see, Greene, Hart, Gatewood, Brush Carter, 2003). The majority of studies that have investigated the micro perspectives of this gender-based relationship focused on the entrepreneurs' human capital and socio-economic status (Cooper- Maysami, & Goby, 1999; Lerner, Brush & Hisrich, 1995; Zapalska, 1997) rather than on their psychological traits, such as perceptions of stress.

At the micro-level dimension of the business effectiveness, the theory asserts that differences in business effectiveness depend on the ability of businesses to adapt internal structures and processes to available opportunities and external constraints (Pfeffer & Salancik, 1978). Such adaptation depends on the actions of the leader of the firm, e.g., the entrepreneur, and like leaders, entrepreneurs, differ in the extent to which they possess the psychological traits, experience and skills to accomplish the necessary fit between their firms' performance and the external environment (Cummings, 1988; Kets de Vries, 1985). A major indicator and one relevant to entrepreneurs' actions, is perceived stress, a factor well established in the research as one affecting managers' actions and found to differ in type and extent across the genders (Geller & Hobfoll, 1993; Kariv, 2006; Portello & Long, 2001). Stress, however, has been scarcely investigated in the context of entrepreneurs and business effectiveness. Additionally, stress experienced as positive or negative reflections or reactions to experiences (Cavanaugh, Boswell, Roehling & Boudreau, 2000; Marino, 1997; Merelman, 1997) and the relationship of these experiences to business outcomes has been overlooked in the research of entrepreneurship.

The studies that did emphasize the psychological factors that influence entrepreneurial business effectiveness (Aldridge, 1997; Bonnett & Furnham, 1991; Frese, Chell, & Klandt, 2000) focused on entrepreneurs' distinct personality traits, and associated these traits with the motivation to start a business rather than with those pertaining to managing it effectively and successfully (Cromie & Hayes, 1988; Langan-Fox, 1995; Shabbir & Gregorio, 1996). Although these studies referred to various psychological factors, most of them did not include stress as one of them.

The ability to explain more of the variations in MOB and WOB effectiveness is essential since studies frequently find that women entrepreneurs are at a disadvantage compared to men, and that WOBs are less likely than MOBs to survive, to succeed and to be equally effective (Aldrich, 1989; Boden & Nucci, 2000; Srinivasan, Woo & Cooper, 1993). Researchers explain this as due to women's lower educational levels, lesser previous work experience (Boden & Nucci, 2000), work-home conflicts (Brush, 1997), and so on.

Accepting as fact that entrepreneurs' personal characteristics are the primary factors governing their performance (Schein, 1994), and thus their business effectiveness, entails the assumption that due to the unique constraints related to their gender, women are more frequently relegated to lower-quality opportunities and hence prone to poorer business effectiveness than men However, incorporating perceptions of stress into the explanatory set of determinants associated with business effectiveness may present a different scenario, one where women appraise stressors differently than men and subsequently develop different types (positive or negative) and/or degrees of perceived stress. Differences in perceived stress may lead to differences in MOB and WOB adaptations to the challenges and constraints they face, e.g., stressors, and to producing different measures of effectiveness between them. For example, if men entrepreneurs appraise difficulties in managerial matters as negatively stressful, while women entrepreneurs appraise financial problems as negatively stressful, then each might attempt to cope with

the same difficulties in different ways – men by improving the managerial factors in their businesses and women by addressing the financial processes in their businesses; as a result two different types of business management would emerge, each focusing on different measures of effectiveness. Moreover, identical stressors may be interpreted conversely – what men might perceive as positive women might perceive as negative, and vice versa. Thus, a given situation might be perceived as threatening, and the owner would seek to eliminate or evade it, or it might be perceived as challenging, and the owner would seek to utilize it for advancing business goals.

Measuring business effectiveness without a subdivision of the types of stressors, and how they are appraised, – as positive or negative – might bias the conclusions and implications regarding MOB and WOB effectiveness.

*Stress in the context of entrepreneurship*

A very limited amount of research on the relationships between entrepreneurship and stress, and between stress and business effectiveness has developed. Studies on psychological stress focus on people's appraisal of events as threatening or challenging, and stressors can, similarly, be evaluated as distinct negative or positive phenomena. Positive appraisals produce propitious feelings, constructive motivation and acceptance of challenges, and ultimately lead to feelings of fulfillment or achievement (Muramatsu, Miyazaki & Ishii, 1987; Van Yperen & Hagedoorn, 2003), while negative appraisals may produce feelings of stress and health-related symptoms, avoidance of challenges and, ultimately, feelings of frustration and failure (Cavanaugh, Boswell, Roehling & Boudreau, 2000; Matteson & Ivancevich, 1987).

Although in the past job-related stress among managers has been described as reaching epidemic proportions (Marino, 1997), producing pressures (Cohen, 1997) and leading to negative effects on work performance, more recently, there has been increasing recognition of the potential positive outcomes associated with job-related stress. However, there is still limited knowledge regarding the nature of the relationship between reported stress and work outcomes. Past findings suggesting a relationship between job-related stress and a variety of negative outcomes (O'Driscoll & Beehr, 1996; Scheck, Kinicki, & Davy, 1997; Zohar, 1997) have dimmed in light of recent surveys indicating that at least some managers perceive stress as leading to positive outcomes (Marino, 1997; Merelman, 1997). Moreover, researchers examining the association between job-related stress and positive outcomes have found relationships between job-related stress and job satisfaction, organizational commitment, and subjective well-being (Kariv & Heiman, 2005; Scheck, Kinicki, & Davy, 1997).

Both positive and negative appraisals can exist concurrently and, as a result, dissimilar stress-related behaviors may emanate from the very same stressor. Since some frequently cited traits characterizing managers are significant for entrepreneurs as well (Begley & Boyd, 1986, 1987; Robbins & Coulter, 2003; Whetten & Cameron, 2005), it is logical to assume that entrepreneurs also experience stress that might effect their business effectiveness. While managers, in their work world, face certain major stressors related to managerial determinants, entrepreneurs face both those same stressors and others that are unique to their entrepreneurial situations (Carland & Carland, 1991; Gartner, 1988), and the combination of the two might affect their perceptions of stress and, as a result, their business effectiveness.

Women entrepreneurs apparently face additional stressors exclusive to their gender, and these may also emerge as predominant contributors to an inclusive comparison of MOB versus WOB effectiveness. The relationship between gender and stress, is well established in the literature on managers (Fotinatos & Cooper, 2005; Kahn & Byosiere, 1992; Lazarus, 1993; Matteson & Ivancevich, 1987); and although less than among entrepreneurs, the relationships among managers are recognized and substantial.

*Business Effectiveness*

Business effectiveness is multifaceted and difficult to measure (Birley & Westhead, 1990; Haber & Reichel, 2005; Kallenberg & Leicht, 1991; Shane & Venkataraman, 2000), either by employing macro-oriented indicators or micro-oriented indicators, and it takes different forms across the genders. Women business owners were found to be more likely than their male counterparts to value personal success criteria while men tend to report a higher and a more positive value on financial outcomes (Orser & Riding, 2004; Fabowale, Orser & Riding, 1995). Thus, no uniform definition of business effectiveness, success or performance has been established across the genders. This should be taken into account while investigating MOB and WOB effectiveness measures.

While there are some studies that indicate various implications of perceptions of stress in several business measures, I was unable to locate any research that examined these topics for gender-based differences in entrepreneurships and/or in MOBs as compared with WOBs. Moreover, mixed results emerged from various examinations of the relationship between owners' stress and their businesses' performance. While some studies found that business growth and performance increase stress (Ogbonna & Harris 2004; Orser & Hogarth-Scott, 2004), others noted that stress affected several indicators of business performance. In a meta-analysis conducted by Harter, Schmidt and Keyes (2004), positive workplace perceptions, as opposed to perceived stress (see, Kariv, 2006), were associated with higher business-unit customer loyalty, greater profitability, higher productivity, and lower rates of employees' turnover. Wah (2000) describes empirical evidence showing how stress and emotional imbalance may negatively affect business productivity in terms of absenteeism, and Ramsay, Scholarios and Harley (2000), while 'testing inside the black box', demonstrated the significant negative affects of job strain on labor productivity and its positive affect on absence rates. Hence, stress may play a dual role, as a contributor as well as a result of business performance measures. This implies that the lack of perceptions of well-being at work, e.g., perceived negative stress, might minimize such measures of business effectiveness. Thus, since the effect of stress on business effectiveness cannot be denied, especially when focusing on MOB and WOB that are smaller in size,[1] the effects of the male or female owner's stress might be more significant in determining the business indicators (Cummings, 1988).

Taken together, the findings in the above review indicate the existence of differences in stress among male and female entrepreneurs and in the effectiveness of MOBs and WOBs (Aldrich, 1989; Cuba, Decenzo & Anish, 1983). The implication of such differences is that entrepreneurs' gender-related stress, positive or negative, if such a distinction can be found, along with the stressors encountered by both men and women entrepreneurs, might at least partially affect MOB and WOB effectiveness measures.

In view of the findings in the literature, as cited above, this research will attempt to investigate the relationship between stress and MOB and WOB effectiveness by focusing on three main hypotheses.

Hypothesis 1: Women perceive higher levels of negative and positive stress as compared to men.
Hypothesis 2: The same stressors encountered by men and women entrepreneurs will affect their perceived stress differently.

Business effectiveness will be measured in this paper by two indicators - business profitability and growth in clients' diversity.

[1] 73% of the entrepreneurship businesses consist of 1–5 salaried employees including the owner; 12% include 6–10 salaried employees; 8% include 11–20 salaried employees and 7% include 21–100 salaried employees, from Israeli Social Security report, 2004.

Hypothesis 3: Negative perceived stress experienced by women entrepreneurs will negatively affect WOB profitability, and positive perceived stress will positively affect WOB in growth in clients' diversity.

**Research design and methods**

*Sampling procedure*: To generate the research data, a national sample of 190 entrepreneurs was selected. Personal contact details on entrepreneurs were submitted by volunteer-driven non-profit organizations whose mandate is to support entrepreneurs in different ways.

*Data collection*: Research assistants personally delivered a four-part questionnaire that was specifically designed for this project to entrepreneurs who had agreed to take part in the research.

*Sample profile:* The 190 entrepreneurs in the sample is comprised of 107 men (56%) and 83 women (43.5%). Most of them, 170 (89.4%), own businesses with up to six employees. Descriptive statistics show that the average age of the sample is 42 (Mean=42; Std. Deviation=9.89) and the average age of the entrepreneurial businesses is approx. 8 (Mean=7.866; Std. Deviation=9.28). Most of the businesses included in this study, 152 (80%), are in the services sector.

*Questionnaires*: The research questionnaire comprises four main parts: (a) a scale of perceived stress; (b) business effectiveness measures; (c) list of stressors; and (d) entrepreneurs' personal and business attributes.

*Theoretical and Operational Definitions*
*Dependent variable – business effectiveness measures*

In this study, two different measures represent the dependent variables: business profitability and growth in client diversity (Harter, Schmidt & Keyes, 2004; Ramsay, Scholarios & Harley, 2000; Wah, 2000).

*Independent variables*

*(a) Perceived stress:* This variable was measured by Cohen, Kamarck and Mermelstein's (1983) 10-item version[2] of a perceived stress scale (PSS). It was used in this study in order to measure the degree to which situations in the respondents' work lives are appraised as positively or negatively stressful; it focuses on the preceding month, thus elevating the strength of the responses. A Principal component factor analysis showing good internal consistency, followed by a reliability test (Cronbach's alpha = 0.76), with coefficients corresponding to inter-rater and test-retest reliability of 0.83 and 0.71 respectively, indicated that this scale is a valid and reliable measure of Israeli adults' stress measurement.

For this study's purposes the PSS was divided into two sub-scales, one representing the negative appraisals of stressful situations encountered (negative perceived stress) and the other representing the positive (positive perceived stress) appraisals.

*(b) Stressors:* Karasek (1979, 1985) Job Content Questionnaire (JCQ) was the instrument used to assess the stressors relevant to the entrepreneurs' work life. A Factor analysis executed, using Varimax and with extraction of the number of factors, emerged three meaningful factors, explaining about 58% of the overall variance; *Social Support*, associated with the support of people involved in the entrepreneurial

[2] This version was chosen since it has maximum reliability compared to the 14- or 4-item versions; the questions are quite general in nature and hence relatively free of content specific to any sub-population group (Cohen, Kamarck & Mermelstein, 1983; Cohen & Williamson, 1988)..

business, i.e., employees, partners and colleagues; *Job Security*, strongly associated with confidence in employment and future possibilities, i.e., my job is steady, my workplace suffered lay-offs,[3] I may develop my career in the future in this business (see, Strazdins, D'Souza, Lim, Broom & Rodgers, 2004); and *Work Demands*, strongly related to daily demands and workload, specifically, my job demands innovation, high professionalism, working fast, working hard, etc. (see, Fox, Dwyer & Ganster, 1993).

*(c) Business indicators:* The two items chosen as business indicators were age of the business (Robb, 2002; Tominc & Rebernik, 2006), and 'changes in number of employees' was chosen as measure of business growth over the years.

*(d) Entrepreneur's characteristics:* Three items were selected to encompass this category – age, educational level and, as an indicator of work-life balance and pressures, age of youngest child, all of which are relevant to both entrepreneurship (Dawson, Breen & Satyen, 2002; Nair & Pandey, 2006) and to stress areas (Greenleese, 2004; Portello & Long, 2001; Siu, Spector, Cooper & Donald, 2001).

## Results

To determine if men and women entrepreneurs differ in experiencing positive and negative stress, as suggested in the first hypothesis, an independent-samples *t*-test was conducted with gender (men, N=105; women, N=79) as factor and the two sub-scales of negative perceived stress and positive perceived stress as dependent variables. The test revealed significant differences between the genders only in negative perceived stress (t=-2.372 (N=184; df=180) p<.05*), with men's means (Mean=2.05; SD=.606) lower than women's (Mean=2.86; SD=.652). No significant differences between the genders emerged in positive perceived stress. Thus, the results for perceived stress provided only partial support for our first hypothesis. The next step was to explore if stressors encountered by men and women entrepreneurs affect perceived stress differently, that is, as positive or negative. To delve into this exploratory research question a Multivariate analysis of variance (MANOVA) was conducted according to gender, followed by a correlation matrix. Both equations, that of men (Wilks $\lambda = 0.759$, $F$ (1,104) = 9.850, $p < 0.01$*5*), and that of women (Wilks $\lambda = 0.462$, $F$ (1, 60) = 12.791, $p < 0.01$**) emerged as significant. The overall $F$ of the men's equations emerged significant for stressors in regard to Social Support (Wilks $\lambda = 0.899$, $F$ (1,104) = 3.497, $p < 0.05$*) and Job Security (Wilks $\lambda = 0.868$, $F$ (1,104) = 4.716, $p < 0.01$**); while in women's equations the significant stressors pertained only in regard to Social Support (Wilks $\lambda = 0.771$, $F$ (1,60) = 3.260, $p < 0.05$*). Neither men's nor women's Work Demands emerged significant stressors.

The next tests performed examined between-subjects effects of both men and women entrepreneurs. For men, a significant association between stressors of Social Support and negative perceived stress ($F$ (1,104) = 7.107, $p < 0.01$**) was found, and stressors of Job Security and both negative perceived stress ($F$ (1,104) = 6.156, $p < 0.01$**) and positive perceived stress ($F$ (1,104) = 5.656, $p < 0.05$*). The significant association appearing in the women's equations is between stressors of Social Support and negative perceived stress ($F$ (1, 60) = 6.741, $p < 0.05$*). The resultant correlation matrix showed that Social Support was significantly and negatively correlated to negative perceived stress among men (R= -.294 (N=100), p<.01**), suggesting that the more social support men entrepreneurs receive, the less negative perceived stress they experience. Job Security is positively and significantly related to positive perceived stress (R=.224 (N=100), p<.05*) and negatively, although insignificantly, related to negative perceived stress. This implies that men entrepreneurs who successfully deal with more of the stressors that increase their job security experience more positive perceived stress. The relationship between Social Support and negative perceived stress among women entrepreneurs emerged as significant and negative

[3] This item has been reversed to a 'positive' direction.

(R=-.389 (N=100), p<.05*). Similarly to the men's equation, women entrepreneurs receiving more social support experience less negative perceived stress.

The third hypothesis attempts to decipher the role of positive and negative perceived stress on the effectiveness measures of MOB and WOB, while controlling for stressors, business attributes and owner's characteristics, assuming higher effects on WOB. Two regression analyses in an Enter method were performed, with business profitability and the growth in client diversity as dependent variables. The independent variables were: negative and positive perceived stress; the stressor factors (i.e., Social Support, Job Security, and Work Demands); age of the business; changes in number of employees from start-up up to the present; owner's age; owner's educational level; and the age of the owner's youngest child (Table 1).

**Table 1** Regression analyses for business profitability and growth in clients' diversity by perceived stress, stressors, business and owners' characteristics split by gender

| ***Variables*** *Business profitability* | **B** | ***β*** | ***T (p)*** |
|---|---|---|---|
| *Men entrepreneurs* | | | |
| Negative perceived stress | -.266 | -.170 | -1.921 (<.05)* |
| Positive perceived stress | .156 | .090 | .951 |
| Stressors - Social Support | .026 | .015 | .164 |
| Stressors - Job Security | .800 | .487 | 5.378 (<.01**) |
| Stressors -Work Demands | .064 | .032 | .347 |
| Business age | -.012 | -.122 | -1.204 |
| Changes in number of employees | .002 | .021 | .235 |
| Entrepreneur's age | .010 | .101 | .853 |
| Entrepreneur's educational level | -.108 | -.116 | -1.319 |
| Entrepreneur's youngest child's age | -.121 | -.164 | -1.494 |
| *Women entrepreneurs* | | | |
| Negative perceived stress | .043 | .032 | .297 |
| Positive perceived stress | .307 | .239 | 2.420 (<.01**) |
| Stressors - Social Support | .164 | .076 | .720 |
| Stressors - Job Security | .659 | .477 | 4.553 (<.01**) |
| Stressors -Work Demands | -.187 | -.131 | -1.238 |
| Business age | -.003 | -.024 | -.202 |
| Changes in number of employees | -.082 | -.176 | -1.873 (<.05*) |
| *-continued-* | **B** | ***β*** | ***T (p)*** |
| Entrepreneur's age | -.004 | -.045 | -.361 |
| Entrepreneur's educational level | -.078 | -.078 | -.710 |
| Entrepreneur's youngest child's age | .000 | .000 | .001 |

Men: $R = .586$; $R^2 = .339$; Adj $R^2 = .270$; $F$ (10, 104) = 4.914; $p < .01$**;
Women: $R = .601$; $R^2 = .361$; Adj $R^2 = .274$; $F$ (10,70) = 4.127; $p > .01$**.

| ***Variables****- Growth in clients' diversity* | **B** | ***β*** | ***T(p)*** |
|---|---|---|---|
| *Men entrepreneurs* | | | |
| Negative perceived stress | -.192 | -.129 | -1.163 |
| Positive perceived stress | .043 | .026 | .243 |
| Stressors - Social Support | .031 | .019 | .180 |
| Stressors - Job Security | .354 | .227 | 2.227 (<.05*) |
| Stressors -Work Demands | .303 | .161 | 1.682 (<.05*) |

| | | | |
|---|---|---|---|
| Business age | -.015 | -.165 | -1.449 |
| Changes in number of employees | -.013 | -.134 | -1.359 |
| Entrepreneur's age | .016 | .172 | 1.290 |
| Entrepreneur's educational level | -.114 | -.129 | -1.297 |
| Entrepreneur's youngest child's age | -.107 | -.153 | -1.238 |
| *Women entrepreneurs* | | | |
| Negative perceived stress | .016 | .011 | .095 |
| Positive perceived stress | .240 | .174 | 1.858 (<.05*) |
| Stressors - Social Support | .325 | .140 | 1.245 |
| Stressors - Job Security | .546 | .367 | 3.290 (<.01**) |
| Stressors -Work Demands | .072 | .047 | .417 |
| Business age | .004 | .031 | .251 |
| Changes in number of employees | -.021 | -.041 | -.368 |
| Entrepreneur's age | -.026 | -.259 | -1.935 (<.05*) |
| Entrepreneur's educational level | .088 | .079 | .795 |
| Entrepreneur's youngest child's age | .026 | .032 | .265 |

Men: $R = .402$; $R^2 = .162$; Adj $R^2 = .124$; $F$ (10, 104) = 1.950; $p < .05$*.
Women: $R = .526$; $R^2 = .277$; Adj $R^2 = .178$; $F$ (10,70) = 2.794; $p > .05$*.

The results indicate that perceived stress reported by men and women entrepreneurs has a significant role in MOB and WOB profitability and growth in client diversity in WOB even when the stressor factors and the business and owners' indicators are included in the equations. Specifically, negative perceived stress has a significant and negative impact on MOB profitability, while positive perceived stress has a significant and positive impact on WOB profitability, suggesting that when men owners of firms experience more negative perceived stress their business profitability decreases, and when women owners experience more positive perceived stress their business profitability increases. Although T, B and β scores of women's perceived stress were higher than those of men, perceived stress emerged as significant for both. In the case of growth in client diversity, on the other hand, perceived stress emerged only in the WOB equation, where positive perceived stress had a significant and positive impact on growth in client diversity. Thus, women entrepreneurs experiencing a greater degree of positive stress experience an increase their businesses' client diversity. This part of our hypothesis was fully supported by these findings.

Of the stressors included in our analyses, Job Security significantly and positively influence both MOB and WOB profitability and client diversity, meaning that higher job security reported by men or by women increases their businesses profitability and client diversity. Work Demands emerged as significant and positively affecting growth in client diversity in MOB only.

**Discussion**

This study aimed to explore the relationship between business effectiveness and perceived stress among men and women entrepreneurs. From the data generated in this study of a national sample of 190 Israeli entrepreneurs, several conclusions can be inferred. The most relevant is that negative perceived stress is experienced differently by men and women entrepreneurs, with women entrepreneurs reporting higher levels of negative perceived stress than men. No significant differences between men and women entrepreneurs emerged regarding positive perceived stress. These findings are at least partially consistent with several studies from the management research field indicating that women managers face a more multifaceted environment than men and thus experience, overall, greater amounts of negative perceived stress than men managers (NG & Chakrabarty, 2005; Somerfield & McCrae, 2000). In view of the

paucity of research on stress in the realm of entrepreneurship, among both genders, these findings are important both academically and practically, as even female-targeted development interventions may fail to implement proposed contributions unless the empirical evidence uncovers the *real* gender differences (Mayoux, 2000) and not the stereotyped ones. Considering our findings that women owners experience more negative stress than men, stress-related programs, specifically designed to minimize women entrepreneurs' negative stress should be ascertained and implemented. Second**,** delving into the 'causes' that lead to gender-related stress, this study's results revealed that social support has a significant role in men's and women's perceived stress, with both experiencing lower negative perceived stress when social support is offered. This finding, like the previous one, is consistent with the importance of managers' conduct since social support appears to be a significant element in managerial performance; however, most of the studies dealing with stress and coping focus on the opposite side of the spectrum, suggesting that social support is a coping strategy for handling perceived stress. Women managers were often found to depend on and to employ more social support than men while experiencing stress (Lim & Teo, 1996) in their attempt to reduce stress. Social support from partners, employees, clients or suppliers as important agents in *preventing* the development of negative stress is thus an innovative, exploratory aspect in entrepreneurship research. The implication of such results are noteworthy: men and women entrepreneurs should be encouraged to engender social networking, which is a known starting point for social support and elicitation of objective feedback (Chambers & Shaw, 2004), thus preventing or minimizing negative stress. Third is job security, which emerged as significant in releasing positive stress only for men entrepreneurs. Previous findings uncovered the reverse, with the greater vulnerability of men as compared to women in elevating negative stress levels as a consequence of job insecurity (Kausto, Elo, Lipponen & Elovainio, 2005). This result again spotlights a different aspect of the gender-related stress-entrepreneurship relationships. Finally, significant effects of perceived stress on the two indicators of business effectiveness, profitability and growth in client diversity, were discovered in the findings. The results exposed higher effects of perceived stress on profitability and client diversity for women entrepreneurs as compared to men. In both business indicators, WOB were affected by the positive perceived stress of their female owners, and MOB's profitability appeared to be affected by the negative perceived stress of their male owners.

While in this study positive perceived stress did not emerge as a distinctly recognized experience by either of the genders, recent findings in other studies demonstrate that women, especially managers, experience higher levels of positive perceived stress (Kim, 2005; Kremer-Hayon & Goldstein, 1990; Lutz, 2005; Shirey, 2004). This study's results illustrate a picture in which the effects of positive perceived stress emerged predominant only in WOB, illuminating the exclusiveness of entrepreneurs as a group, and the specific gender-related aspects of their business effectiveness. Moreover, these results strengthen findings, still not full agreed upon by researchers, postulating that positive perceived stress exists, and that it has a role in work-related behaviors (Marino, 1997; Merelman, 1997), and which we tested and found to affect business effectiveness measures. Differences between the genders in negative stress and similarities in positive stress may imply that women make more 'efficient' use of their emotional experiences of well-being and positive feelings e.g., positive perceived stress as an impetus for acquiring more benefits for their businesses. By forwarding the enthusiasm they derive from feeling 'on top of things' or from 'being confident about their ability to handle problems' they succeed in elevating the quality of their services, for example, and both profitability and growth in client diversity may result. The results seem to show that while facing barriers and constraints, women entrepreneurs not only activate the vigorous aspect of stress to lead to good business outcomes, they also disregard the negative emotions of 'being upset' or 'being overloaded', agitation and overload in their conduct as owners.

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