ENTREPRENEURIAL SUCCESS AS A FUNCTION OF HUMAN CAPITAL AND PSYCHOLOGICAL FACTORS AMONG MICRO AND SMALL ENTERPRISES OPERATORS: A PSYCHOLOGICAL PERSPECTIVE STUDY

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ABSTRACT
The present study examined the effects of selected human capital indices and psychological factors on entrepreneurial success among micro and small enterprises operators in Ethiopia. Specifically, the main objectives of the study were to: i) determine the extent of effects of human capital and psychological factors on subjective personal success, and ii) examine the meditational role of psychological factors in the link between human capital and subjective personal success. Three hundred and two (186 males and 116 females) participants of the study selected using stratified and simple random sampling techniques from three towns (Adama, Bishoftu and Dukam) of East Shoa zone of Oromia region, Ethiopia filled in self-report questionnaire consisting of items and scales developed and/or adapted for the purpose. Data obtained from the participants were mainly analyzed using simple correlation, linear multiple regression analysis, and path analysis. The analyses suggested that from human capital indices, prior exposure to entrepreneurship and from the psychological factors all (entrepreneurial self-efficacy belief, collective efficacy belief and perceived work stress) considered stood out to have significant effects on subjective personal success. The psychological factors partly mediated the effects of some human capital indices on entrepreneurial success. Implications are suggested.

Key Words: Micro and small enterprises, Human capital, Entrepreneurial self-efficacy belief, Collective efficacy belief, Perceived work stress

Introduction

Micro and small enterprises as part of entrepreneurship play a crucial role in socio-economic development of developing countries. They contribute to attainment of economic and social goals, through profit generation, creation of mass employment, reducing poverty, and equating wealth distribution (Frese & de Kruijf, 2000; Panda, 2002; Rauch & Frese, 2000b). In Africa, for instance as, Frese and de Kruijf pointed out, without contribution of micro and small scale business owners there would be serious economic handicaps in many countries. Micro and small enterprises sector is the leading force in the development of the content( Africa) economies and are making significant contributions (Chu, Kara & Benzing, 2008; Frese & de Kruijf, 2000).
Even it has been suggested that micro and small enterprises are suitable to the factor endowment of African countries as they utilize domestic resources and use labour-intensive technology. Its lesser capital and skill requirement imply that they can be easily established and operated by the young entrepreneurs from lower social strata (Solomo, 2004).

As firm owner, micro and small enterprise operators’ desire and work towards success. However, their endeavors or bids are not always success stories. For instance, according to Frese and de Kruif (2000), only 20 per cent of micro enterprises grew in African context, which means that 80 per cent remain stagnant or died and did not add any new employees to their ranks. They further suggested that only 1 per cent of micro enterprises that started out small (with less than five employees) gradually became small scale business (with more than ten employees). Enterprises with ten to fifty employees constituted only 2 per cent of the enterprises in Africa.

Many studies (Chu, et al 2008; Honig, 1998; Mulu, 2007; Temtime & Pansiri, 2004) examined contributing factors to entrepreneurial success at different settings and suggested several factors ranging from external environmental(financial and non-financial factors) to psychological factors of the entrepreneurs. However, the studies vary in perspectives (economic, sociological and psychological) level of analyses (firm versus individual), success factors considerations, and success measurements.

**Literature Review**

Entrepreneurship in general and micro and small enterprises in particular, though received policy attention and attracted scholars from diverse backgrounds, psychological perspective studies which involve psychological variables, while important for entrepreneurial success study (Frese & de Kruif,2000), appeared scanty in Africa. According to Frese & De Kruif studying micro enterprises from an economic perspective alone, ignoring psychological aspects, may fall short for some theoretical and practical reasons. Theoretically, the main actor in the sector is the business owner. Without the owner nothing or little will happen in the firm. He or she is the one who has founded the firm, dominates its processes, and manages its daily affairs. Thus, his or her behaviour and action count. Practically, there is a gap between government’s attempts to stimulate the development of private enterprise sector, through appropriate economic and legal framework, and the actual success of the business owners and this gap between general policy decisions and actual behaviour by the actors in the market can only be addressed adequately with psychological knowledge.

Thus, it is crucial to investigate determinants of entrepreneurial success from psychological dimension and the present study investigated the effects of some selected non-financial and owner-specific human capital and psychological constructs on entrepreneurial success. The non-financial person-specific entrepreneurial factors emphasized in literature (Ehigie & Umore, 2003; Panda, 2001; Rauch & Frese,2000a; Rauch & Frese,2000b; Unger,2006) included human capital such as years of schooling, parental occupation and experience, specific knowledge and
skills, and psychological characteristics such as need for achievement, efficacy beliefs, locus of control, risk taking behavior, and perceived work stress as important factors in determining entrepreneurial intention and success in micro and small scale setting.

Based on review of various studies (Chen Greene, Crick, 1998; Frese, Brantjes & Hoorn, 2002; Grant & Ferris, 2009) general education level, special training (technical and vocational education and training), and prior exposure to entrepreneurship as human capital indices; and efficacy beliefs (entrepreneurial self-efficacy belief and collective efficacy belief) and perceived work stress as psychological factors were considered.

Hence, the main aim of the present study was to investigate the extent to which selected human capital indices and psychological factors affect entrepreneurial success among micro and small enterprises operators in Ethiopia context. Besides, the study examined also how these selected factors intertwined in affecting entrepreneurial success. The schematic diagram (Fig.1) depicted the theoretical framework (for the meditational role of psychological factors) in the link between human capital and entrepreneurial success.

**Figure 1: Schematic diagram of the theoretical model investigated**

The general assumption is that human capital and psychological factors affect entrepreneurial success in an intricate way. That is the influence of human capital on success can be pronounced directly and/or indirectly via psychological factors. The following research questions were proposed in order to address the aforementioned assumptions and purposes:

1. To what extent do human capital (general education, technical and vocational education and training, and prior exposure to entrepreneurship), and psychological factors 

![Schematic diagram of the theoretical model investigated](image-url)
(entrepreneurial self-efficacy belief, collective efficacy belief and perceived work stress) jointly predict subjective personal success among micro and small enterprises operators? 

2. What are the direct effects of human capital on subjective personal success among micro and small enterprises operators? 

3. What are the indirect effects of human capital indices (i.e. mediated by psychological variables) on subjectively perceived success among micro and small enterprises operators?

Methodology

Participants of the Study

The study was conducted in Ethiopia, a country located in the horn of Africa. The participants of the study were micro and small enterprises holders organized in teams to accomplish their activities in urban areas of East Shoa Zone, Oromia region of Ethiopia. To select participants of the study, multi stage, stratified, and simple random sampling techniques were employed. Taking the size of the population into consideration three towns from the zone namely Adama, Bishoftu, and Dukam were taken. From the three towns, half of kebeles (the smallest unit of administration in Ethiopian urban areas) that is 5 kebeles from Adama (from total 10 kebeles), 2 kebeles from Bishoftu (from 4 total kebeles), and 1 kebele from Dukem (from 2 total kebeles) were selected randomly. From these kebeles, 5% of micro and small scale enterprises (116 micro and small enterprises in figure) were selected using stratified and simple random sampling techniques. The basis of stratification was economic sectors in which the micro and small enterprises were engaged. From these enterprises 360 micro and small enterprises operators (about half of their members) were selected using stratified and simple random sampling techniques as subjects of the study. Here, sex was the basis of stratification. Out of 360 distributed questionnaires 38 were not returned and 20 were discarded from the study for the reason that they failed to provide consumable complete data. Hence, the study was based on 302 respondents (186 males and 116 females).

Data Collection Tool

To collect data for the study, a battery of self-report questionnaire consists of Biographic data, Prior exposure to entrepreneurship scale, Entrepreneurial self-efficacy scale, Subjective personal success scale, Collective efficacy scale, and Perceived work stress scale was used. Biographic data form was utilized to gather information regarding demographic variables directly related to the study: age, sex, general educational status, whether participants received technical and vocational education and training, parent occupation, marital status, and firm sectors.

To measure prior exposure to entrepreneurship, items used and procedures followed by Kamau-maina (2008) were adapted. Micro and small enterprises operators were asked to four ‘YES’ or ‘NO’ items asking them whether parents, relatives, friends/neighbors or themselves were
involved in business in the past. A ‘YES’ response scored ‘1’ while a ‘NO’ response scored ‘0’. The scores were then aggregated to measure the width of exposure. In a second level measure, for each of the ‘YES’ responses, the operators were asked to answer ‘YES’ or ‘NO’ to a statement that the experience was mostly positive. ‘YES’ response scored ‘+1’ while a ‘NO’ response scored ‘-1’. These scores were then aggregated to determine the positive nature of the exposure.

Regarding efficacy beliefs, the scale used to assess operators’ entrepreneurial self-efficacy belief was adapted from Lindsay, Lindsay, Jordaan, and Mapunda’s (2006) work which consists of 37 items. The scale was given to 5 professional (3 psychologists and 2 MBA scholars at Adama University, Ethiopia) for judgements of its content validity and the appropriateness of the items to the Ethiopia context on ‘Yes/No’ scale. Thirty three items which received 80 percent support from judges were selected and used to measure the construct. The response for the items is in 5-point Likert-pattern ranging from “Can not do (1)” to “Certainly I can do (5)”. For example two items included in the scale are: “Identify an exceptional business opportunity”, and “Obtain finance for a new business.” Lindsay et al., (2006) reported reliability of the scale to be α=.95.

To measure the collective efficacy belief, Riggs, Warka, Babasa, Betancourt and Hooker (1994) Collective Efficacy Scale which consists of 7 items with 7-point rating scale ranging from Strongly Disagree(1) to Strongly Agree(7), was used. Collective efficacy is conceptualized as team members’ perceptions of their group talents and abilities to perform the job. This scale was picked since it was designed to measure perceived team ability to accomplish the tasks and the items focused on perceptions of other team members’ abilities. For example, two of the items are, "The group I work with has above average ability," and "Some members of this group should be fired due to lack of ability." Negatively worded items were reverse coded so that higher collective efficacy scores reflect higher level of collective efficacy experience. The reported reliability coefficient of the scale was α=.86.

To measure perceived work stress, based on various sources (e.g .Grant & Ferris, 2009), a scale which can assess perceived work stress (items related to job characteristics, relationships at work and situational constraints in self employed settings) was developed by the researcher. To determine the validity of the scale the procedure to validate Entrepreneurial self efficacy scale, described above was fallowed. As a result, of 23 originally developed items, 4 items were reduced and thus, the perceived work stress scale used for this study consists of 19 items.

Regarding subjective personal success of the operators, since the focus of this research was on beginner entrepreneurs and in such context taking actual financial and/or firm’s size growth as measures of entrepreneurial success is more or less difficult to ascertain; rather, the focus must be on what has been perceived as achievement in terms of initially set objectives (Hallak, 2008; Lindsay et al., 2006). Thus, subjective personal success was considered and assessed in terms of how these beginners (micro and small enterprise proprietors) sense their success based on their personal reasons for wanting to be organized in micro and small enterprises team and run
businesses of their own. Hence, in measuring subjective personal success, the adapted (from Lindsay et al., 2006) subjective personal success scale was used. Based on these researchers suggestion, participants of the study were asked how successful they have been in achieving each of their reason they had conceived while they initially started micro and small business of their own, on scales ranging from Unsuccessful (1) to Successful (5). Lindsay et al., (2006) had reported the reliability of the items as $\alpha = 0.89$.

After adaption and/or development and validation each of its sub-scale was completed, the self-report questionnaire was translated into local language-Amharic by language professionals from Adama University. In translation process, to avoid distortion two-way approaches, that is English - Amharic and Amharic - English translations were followed. Any discrepancies were settled through discussion of the two translators. To sharpen the tool for final use pilot study was done. In the pilot study, a battery of Amharic version of self-report questionnaire was administered to 100 micro and small enterprises operators in Mojo town of which 80 (M= 55, F=25) filled in the questionnaire appropriately and returned. From pilot study, the obtained internal consistence for each sub-scale was found out to be: for prior exposure to entrepreneurship $\alpha =.77$, entrepreneurial self-efficacy scale $\alpha =.88$, collective efficacy belief $\alpha = .84$, perceived work stress $\alpha = .88$, and subjective personal success $\alpha = .86$ which for some, were more or less consistent with originally reported reliabilities and above acceptable range for research in social science.

Data collection Procedures and Techniques of Analyses

In the main study, a battery of Amharic version of self report questionnaire with necessary orientation was administered to selected respondents in study sites in group in their respective kebele offices. In examining the collected data statistical techniques such as frequency, Pearson product moment correlation, linear multiple regression analysis and path analysis were employed. Before proceeding with the above mentioned analyses, the assumptions underlying the use of multiple regression and path analysis such as normality and linearity were checked. There was no evidence for the violation of assumptions.

Results

Background of the participants

It was identified that 186 (61.6%) of the participants were males while the remaining 116 (38.4) were females. The mean age of the participants was 28.58 year (standard deviation of 8.12), with minimum year 17 and maximum year 65. Concerning marital status of the participants, 167(55.3%) single, 125(41.4) married, 8 (2.6%) divorced, and 2 (0.7%) were widowed. Regarding educational status, of the total participants 25 (8.3)% of them have tertiary education, 86 (28.5)% TVET level graduates and the remaining 120 (39.7%), 57(18.9%), and 14 (4.6%) have secondary, upper primary, and lower primary/ read and write status respectively.
Inter-correlations among human capital indices, psychological variables and subjective personal success

The means and standard deviations for each variable considered in the analysis are presented in Table 1 along with their inter-correlations among them.

Table 1: Means, Standard Deviations, and Inter-correlations among Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Edu. level</th>
<th>TVET</th>
<th>PExtE</th>
<th>ESEB</th>
<th>CEB</th>
<th>PWS</th>
<th>SPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edu.level</td>
<td>3.17</td>
<td>.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TVET</td>
<td>.29</td>
<td>.45</td>
<td>.547**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PExtE</td>
<td>2.40</td>
<td>2.27</td>
<td>.004</td>
<td>-.037</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESEB</td>
<td>3.40</td>
<td>.40</td>
<td>.198**</td>
<td>.219**</td>
<td>.355**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEB</td>
<td>5.24</td>
<td>1.17</td>
<td>-.038</td>
<td>-.031</td>
<td>.199**</td>
<td>.265**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PWS</td>
<td>3.31</td>
<td>.62</td>
<td>.117*</td>
<td>.149**</td>
<td>-.168**</td>
<td>-.137*</td>
<td>-.182**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPS</td>
<td>3.73</td>
<td>.57</td>
<td>.002</td>
<td>-.061</td>
<td>.422**</td>
<td>.478**</td>
<td>.470**</td>
<td>-.370**</td>
<td></td>
</tr>
</tbody>
</table>

** P<.01.
* P <.05

Edu.level: Educational Level
ESEB: Entrepreneurial Self-Efficacy Belief
TVET: Technical & Vocational Education and Training
CEB: Collective Efficacy
PExtE: Prior Exposure to Entrepreneurship
PWS: Perceived Work Stress
SPS: Subjective Personal Success

Table 1 depicts that subjective personal success had strong significant relationship with prior exposure to entrepreneurship (r = .422, P < .01) but its relationships with educational level and technical and vocational education and training failed to reach statistical significance ( P > .05). On the other hand, subjective personal success had strong positive relationship with entrepreneurial self-efficacy belief(r = .478, P < .01), collective efficacy belief (r = .470, P < .01) and strong negative relationship with perceived work stress (r = -.370, P < .01). Concerning the associations of psychological variables with human capital indices, it was found out that entrepreneurial self-efficacy had positive significant relations with all human capital indices: educational level (r = .198, P < .01), technical and vocational education and training ( r = .219, P < .01 ) and prior exposure to entrepreneurship ( r = .355 P< .01). Nevertheless, collective efficacy belief (with human capital indices) had only positive significant relationship with prior exposure to entrepreneurship (r = .199, P < .01). Perceived work stress had positive and significant relationship with educational level ( r = .117, P < .05 ) and technical and vocational education and training ( r = .149, P < .01), but it had negative relationships with prior exposure to entrepreneurship ( r = -.168, P < .01). Concerning the relationships among psychological
variables Table 1 depicts positive correlations between the two measures of efficacy beliefs (r = .265, P < .01). On the other hand the association of perceived work stress with entrepreneurial self-efficacy belief (r = -.137, P < .05) and collective efficacy belief (r = -.182, P < .01) were negative and significant.

**Influence of human capital indices and psychological factors on subjective personal success**

One basic objective of this research was to examine the extent to which human capital indices and psychological factors influence personal success among micro and small enterprises operators. In line with this, the relation of human capital indices and psychological factors in combination on subjective personal success was examined. The results are depicted in Table 2.

**Table 2: Results of Regression Analysis for Predicting Subjective Personal Success from Human Capital Indices and Psychological Factors**

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.759</td>
<td>.318</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edu.level</td>
<td>1.725E-02</td>
<td>.030</td>
<td>.030</td>
<td>.582</td>
</tr>
<tr>
<td>TVET</td>
<td>-.116</td>
<td>.065</td>
<td>-.093</td>
<td>-1.789</td>
</tr>
<tr>
<td>PExTe</td>
<td>5.294E-02</td>
<td>.012</td>
<td>.211</td>
<td>4.566*</td>
</tr>
<tr>
<td>ESEB</td>
<td>.436</td>
<td>.069</td>
<td>.306</td>
<td>6.289*</td>
</tr>
<tr>
<td>CEB</td>
<td>.147</td>
<td>.022</td>
<td>.304</td>
<td>6.767*</td>
</tr>
<tr>
<td>PWS</td>
<td>-.207</td>
<td>.040</td>
<td>-.227</td>
<td>-5.125*</td>
</tr>
</tbody>
</table>

*P<.01

R = .684

R^2 = .468

F(6,285) = 43.249 (P<.0001)

Edu.level: Educational Level
CEB: Collective Efficacy
TVET: Technical & Vocational Education and Training
PWS: Perceived Work Stress
PExTe: Prior Exposure to Entrepreneurship
ESEB: Entrepreneurial Self Efficacy Belief

The regression analysis whose major result is depicted in Table 2 shows that the relationship between human capital and psychological factors as a group and perceived entrepreneurial success was positive and significant. The multiple correlation(R = .684) shows a considerable relationships between human capital indices and psychological factors in combination with entrepreneurial success. However, from the beta weights judgment, from human capital indices, only prior exposure to entrepreneurship contributes significantly to subjective personal success. The influences of educational level and technical and vocational education and training on perceived success were not significant (P>.05). On the other hand all psychological factors contributed significantly to subjective personal success. Generally, the human capital and psychological factors collectively explained about 47% of the subjects’ variation with respect to subjective personal success.
Psychological factors as mediator of the effect human capital on subjective personal success

From the correlation matrix shown in Table 1 it can be noted that human capital factor particularly prior exposure to entrepreneurship was significantly correlated with all psychological variables. All the Psychological factors were also significantly correlated with subjective personal success. This pattern of correlation supported the idea of examining the direct and indirect effects of human capital indices (via psychological factors) on entrepreneurial success of the operators. The argument was that human capital could influence psychological variables which in turn contributed to entrepreneurial success. The results of path analysis are shown in figure 2

Figure 2: Path models representing the effects of human capital and psychological factors on subjective personal success as determined from standard multiple regression analyses

<table>
<thead>
<tr>
<th>Edu. Lev.</th>
<th>ESEB</th>
<th>CEB</th>
<th>PWS</th>
<th>SPS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.098</td>
<td>0.030</td>
<td>0.306*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.057</td>
<td>-0.037</td>
<td>0.304*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.112</td>
<td>0.179*</td>
<td>-0.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.361*</td>
<td>0.199*</td>
<td>-0.164*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-0.003</td>
<td>0.227*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.211*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*P<.05

Edu. Lev. : Educational Level  PWS : Perceived Work Stress
PExtE : Prior exposure to Entrepreneurship  SPS : Subjective Personal Success
ESEB: Entrepreneurial Self-Efficacy Belief  CEB : Collective Efficacy Belief
TVET : Technical and Vocational Education and Training
As indicated in figure 2, from human capital indices only the direct effect of prior exposure to entrepreneurship on subjective personal success ($\beta = .211$) was significant. The direct effects of other human capital indices (educational level and technical and vocational education and training) were not different from zero. Technical and vocational education and training ($\beta = .179$) had positive significant influence on entrepreneurial self-efficacy belief while its influences on collective efficacy belief and perceived work stress were failed to reach statistical significance level ($P > .05$). The effects of educational level on all psychological variables were not significant. Thus, the effects of educational level neither on psychological factors nor perceived success were significant ($P > .05$). On the other hand, the effects of all psychological variables on operators’ success were significant. The path analysis revealed that from psychological factor entrepreneurial self-efficacy belief ($\beta = .306$) and collective efficacy belief ($\beta = .304$) had strong positive influence on perceived success while perceived work stress ($\beta = -.227$) had negative influence. A summary of the direct and indirect effects of the variables included in the study on subjective personal success are presented in Table 3.

**Table 3: Summary of Path Analysis Indicating Direct and Indirect Effects of Human Capital and Psychological Factors on Subjective Personal Success**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Direct effect</th>
<th>Indirect effect</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edu. level</td>
<td>ns*</td>
<td>ns*</td>
<td>--------</td>
</tr>
<tr>
<td>TVET</td>
<td>ns</td>
<td>.055</td>
<td>.055</td>
</tr>
<tr>
<td>PExtE</td>
<td>.211</td>
<td>.208</td>
<td>.419</td>
</tr>
<tr>
<td>EEB</td>
<td>.306</td>
<td>-----</td>
<td>.306</td>
</tr>
<tr>
<td>CEB</td>
<td>.304</td>
<td>-----</td>
<td>.304</td>
</tr>
<tr>
<td>PWS</td>
<td>-.227</td>
<td>-----</td>
<td>-.227</td>
</tr>
</tbody>
</table>

*ns: not significant

Edu. level: Educational Level
CEB: Collective Efficacy
TVET: Technical & Vocational Education and Training
PWS: Perceived Work Stress
PExtE: Prior Exposure to Entrepreneurship
ESEB: Entrepreneurial-Self Efficacy Belief

Table 3 shows that the direct effects of psychological factors on subjective personal success were all significant. Among human capital indices only prior exposure to entrepreneurship had direct and indirect effects on personal success of micro and small enterprises operators. The indirect effect of technical and vocational education and training on success was turned out to be significant while both direct and indirect effects of educational level on subjective personal success were not significant.
success of the participants’ were not significant. In general, with respect to the total effects, prior exposure to entrepreneurship, entrepreneurial self-efficacy belief, collective efficacy belief, perceived work stress, and technical and vocational educational and training had meaningful influences on success.

Discussion

The results of the study revealed that strong positive significant relationship between human capital indices and psychological factors in combination and subjective personal success. The R2 of .468 indicated that about 47% of variability in participants’ perceived success in their entrepreneurial activities was explained by human capital indices and psychological factors considered in combination.

From betas analysis, however, among human capital indices, only the influence of prior exposure to entrepreneurship (β =.211) on perceived success was significant. The positive effect of experience on entrepreneurial success was also reported by others (Panda, 2002; van Prag, 2003; Westhead et al., 2009). Thus, it appeared that prior exposure to entrepreneurship and judging that experience as something positive contributed significantly to success.

However, the non-significance of influences of educational dimensions of human capital (general educational level, and technical and vocational education and training) particularly that of technical and vocational education on entrepreneurial success is more or less inconsistent with other studies (Honig, 1998; Panda, 2002). The non-significant effect of technical and vocational education and training on success obtained in this study may be due to success measurement used in the study which was perceived success unlike other studies that used economic measures such as profit and sales. Technical and vocational education and training could have different result if success was measured in terms of economic success. Technical and vocational educational and training graduates because of their high human capital may set high objectives which are not attainable within short period of time and hence may not perceive success soon.

Concerning the psychological factors (entrepreneurial self-efficacy belief, collective efficacy belief, and perceived work stress) the study revealed their significant contributions to success. The regression analysis elucidated that efficacy beliefs (entrepreneurial self-efficacy belief and collective efficacy belief) contributed positively and significantly to variability to entrepreneurial success while the contribution of perceived work stress was negative and significant.

Regarding entrepreneurial self-efficacy belief, finding obtained in this study is similar to other studies (Chandler & Jansen, 1992; Hallak, 2008; Lindsay & Balan, 2005). Entrepreneurial self-efficacy belief as conceptualized in this study is related to the micro and small enterprises operator’s belief that he or she could carry out the activities necessary to be a successful entrepreneur. When the entrepreneur has high level of entrepreneurial self-efficacy belief the greater likely hood that the business carried out by operator who adopts entrepreneurial orientation, has interest, motivation, perseverance, less self-doubt and persistence in his or her
effort to try and reach goals. Collective efficacy which is conceptualized as micro and small enterprises operator’ level of confidence the group to which he/she is able to perform the job may operates in similar fashion with entrepreneurial self efficacy beliefs in affecting subjective personal success of micro and small operators. Finding obtained from this study suggested that micro and small enterprises proprietors who have confidence to perform the various entrepreneurial tasks and also in their group capability appeared to perceive success in their jobs than their counterparts.

The study also suggested the negative effect of perceived work stress on success among micro and small enterprises operators. This result is more or less consistent Wincent and Örtqvist’s (2009) review of literature who examined role stress in boundary spanning roles similar to the entrepreneurial one and elucidated the negative relationship between role stress and job performance. However, contrary to this result, studies by Ehigie and Umore, 2003 and Chu et al., 2008 reported positive contribution of stress to entrepreneurial performance.

In order to understand the web of causations among variables considered in this study in influencing entrepreneurial success the mediating role of psychological factors was examined in order to check if the impacts of human capital indices on success are mediated by their effects on psychological factors. Summary of the path analysis elucidated the meditational role of psychological factors in the link between human capital and entrepreneurial success. That means, the path model employed in this study partly supported the theoretical prediction of the effects of human capital on entrepreneurial success directly and through influencing psychological factors (indirectly) which in turn influence success. As expected, human capital indices particularly prior exposure to entrepreneurship, influence entrepreneurial self efficacy belief and collective efficacy belief positively and perceived work stress negatively which in turn all influences entrepreneurial success accordingly. The positive effect of technical and vocational education and training on entrepreneurial success suggested its role in boosting efficacy in doing entrepreneurial tasks and roles among proprietors.

Thus, the assertion that human capital indices influence entrepreneurial success directly and indirectly through influencing psychological factors was partly supported. In concrete terms, micro and small enterprises operators who had a prior exposure to entrepreneurship and appraised their exposure positively had high entrepreneurial self efficacy belief and collective efficacy belief than those who had not exposed or had less exposure to entrepreneurship. Besides, prior exposure to entrepreneurship appeared to influence perceived stress negatively. That means prior exposures to entrepreneurship appeared to contribute importantly to betterment of efficacy beliefs (entrepreneurial and collective efficacy beliefs) and minimize work related stress which in turn all contributed to entrepreneurial success. The findings obtained regarding the meditational roles of psychological factors particularly entrepreneurial self-efficacy and collective efficacy beliefs coincide with literature which describes how the person accumulates efficacy belief (Bandura, 1997).
Conclusions

In general, the current study investigated owner-specific human capital and psychological factors as determinants entrepreneurial outcomes among micro and small scale operators. The study based on a battery of questionnaire consists of scales such as entrepreneurial self-efficacy belief, collective efficacy belief, perceived work stress, subjective personal success and prior exposure to entrepreneurship which asked participants to self-identify their responses/characteristics and thus, there may be susceptibility to response set such as social desirability. Despite the researcher’s effort to clarify purposes of the study, subjects may responded to some of the items in the scales not on the basis what they really feel but on the basis of what they think are socially acceptable. On the other hand, from the angle of social action theory, self report has its own advantage as individual’s perception of the situation is critical since it affects goals as well as means and actions taken to achieve the goals (Ehigie & Umoren, 2003; Hallak, 2008). Particularly, in entrepreneurship setting individual’ definition of situation counts in determining entrepreneurial behaviour.

In spite of the above mentioned limited drawback, the following major conclusions and implications can be drawn from the present study. First, human capital particularly prior exposure to entrepreneurship and psychological factors considered (entrepreneurial self efficacy belief, collective efficacy belief, and perceived work stress) were found out to be important factors for entrepreneurial success in micro and small enterprises context. These factors explained large amount of variance in micro and small scale operators’ subjective personal success. Thus, micro and small enterprises operators who had prior exposure to entrepreneurship and appraised it positively, personally feel confident to accomplish his/her entrepreneurial roles and tasks, confident in his/her group to perform the job, and less stressed in his/her work, appeared to met their initially set objectives than their colleagues and thus have had high subjective personal success. Besides, the psychological factors considered in the study, partly mediate the effects of prior exposure to entrepreneurship and, technical and vocational education and training on perceived entrepreneurial success. It appeared that experience and knowledge gained from authentic experience and training ignited efficacy beliefs and trim down work stress which in turn contributed to attainment of objectives initially set by micro and small enterprises operators.

Generally, the study investigated the effects of some operator-specific personal and psychological characteristics significant for entrepreneurial outcomes among micro and small enterprises operators in Ethiopia context. The outcomes of the study have some theoretical implications for entrepreneurship and practical suggestions for strengthening micro and small enterprises. Some of the implications are:

1. Theoretically, the study adds knowledge to literature on the mechanisms by which human capital has positive effects on entrepreneurial success. The study uncovered that besides
to its direct effects prior exposure to entrepreneurship has indirect effect through influencing psychological factors.

2. The study adopted psychological perspective in entrepreneurship research in micro and small enterprises context. Following this paradigm, the study uncovered owner-specific characteristics and psychological factors as important determinants of entrepreneurial success. Thus, this framework highlighted potentially valuable new avenues for assisting micro and small enterprises operators in their effort to be successful because the dimensions identified here are open to modification through appropriate short-term trainings.

References


