



The effects of becoming an entrepreneur on the use of psychotropics among entrepreneurs and their spouses

Dahl, Michael S.; Nielsen, Jimmi; Mojtabai, Ramin

Published in:
Scandinavian Journal of Public Health

DOI (link to publication from Publisher):
[10.1177/1403494810375490](https://doi.org/10.1177/1403494810375490)

Publication date:
2010

Document Version
Accepted author manuscript, peer reviewed version

[Link to publication from Aalborg University](#)

Citation for published version (APA):
Dahl, M. S., Nielsen, J., & Mojtabai, R. (2010). The effects of becoming an entrepreneur on the use of psychotropics among entrepreneurs and their spouses. *Scandinavian Journal of Public Health*, 38(8), 857-863. <https://doi.org/10.1177/1403494810375490>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

Take down policy

If you believe that this document breaches copyright please contact us at vbn@aub.aau.dk providing details, and we will remove access to the work immediately and investigate your claim.

PRESCRIPTION OF PSYCHOTROPICS IN FIRST-TIME ENTREPRENEURS AND
THEIR SPOUSES

Michael S. Dahl, PhD

Associate Professor of Entrepreneurship

Department of Business Studies, Aalborg University

Jimmi Nielsen, MD

Unit for Psychiatric Research, Aalborg Psychiatric Hospital, Aarhus University Hospital

Abstract word count: 200

Main manuscript word count: 2,578

Number of references: 28

Corresponding author

Michael S. Dahl, Aalborg University, Dept. of Business Studies, Fibigerstræde 4, 9220 Aalborg Ø,
Denmark. Phone: +45 99408268. Fax: +45 98156013. E-mail: md@business.aau.dk.

ABSTRACT

Entering entrepreneurship is known to be a demanding activity with increased workload, financial uncertainty and increased levels of stress. Despite this knowledge, there are no systematic studies on how entrepreneurship affects the people involved. The authors investigate prescriptions of psychotropics for 12,412 entrepreneurs and their 5,007 spouses in the first year after becoming entrepreneurs in a matched case-control study. The entrepreneurs become entrepreneurs from 1999-2001 and their use of psychotropics is studied in the year after. The authors find that entrepreneurs founding business with no employees have higher likelihood of receiving prescriptions for antidepressants compared to their control group of non-entrepreneurs (odds ratio 1.23 [95% CI: 1.07-1.46], $P=0.024$). Entrepreneurs founding larger business with more employees (only 10% of all entrepreneurs) are less likely to receive antidepressants (0.41 [95% CI: 0.23-0.75], $P=0.024$). The authors find that spouses of these entrepreneurs are more likely to get prescriptions for antidepressants (1.40 [95% CI: 1.06-1.85], $P=0.019$) and hypnotics/anxiolytics (1.40 [95% CI: 1.04-1.86], $P=0.024$). This study shows that there is a significant connection between entering entrepreneurship and receiving psychotropics. It shows that the spouses of entrepreneurs are even more likely to receive this medication than the entrepreneurs themselves, emphasizing that entrepreneurship potentially have negative consequences.

Medical Subject Headings

Anxiety Disorders [F03.080], Depressive Disorder [F03.600.300], Entrepreneurship [J01.219.375], Mental Health [F02.418], Sleep Disorders [F03.870], Sociology [I01.880]

MOTIVATION

Western world economies are relying heavily on continuous entry into entrepreneurship to secure the future welfare of their populations. This strategy involves numerous initiatives to increase the number of entrepreneurs. However, given that entrepreneurship is a difficult and complex task, this strategy could involve negative consequences.

Prevalence of persons entering entrepreneurship is around 2-4 % every year (1). Often entering entrepreneurship means leaving a secure wage-work for a risk-bearing future where the family's future economic well-being could be on the line (2). In addition, entering entrepreneurship is associated with severe risk factors, e.g. increased workload, divorce rate, financial risk and increased level of stress (3-5). Around 40 % of new companies will close within the first year and 60 % within five years which makes the life of new entrepreneurs challenging (6-8). Especially, the first years of entrepreneurship are associated with these challenging factors because it takes time for new businesses to adapt to business life and for entrepreneurs and their relatives to adapt to a new way of living. Failure can have severe personal and financial consequences because entrepreneurs often have invested a significant amount of the family's financial resources in the firm.

Changes in the work organization, e.g. downsizing or expanding, have been associated with an impact on the health of employees (9-11). Kivimäki et al. found that downsizing was correlated with an increased use of psychotropics among the employees remaining in the companies downsizing (9). The health of new entrepreneurs is important because proper health monitoring and guidance on entrepreneurship might increase the chances of survival for the company and decrease the negative impact on the lives of the entrepreneurs and their relatives. Especially in smaller companies family members often help or support financially which also make them prone to stress and mental health problems (5).

Common symptoms of stress are insomnia, tiredness, pain, depression and stomach problems (12;13). Stress leads to activation of the hypothalamus-pituitary-adrenal axis (HPA) and as consequence

depression might occur (14). Work stress have also been found to increase the risk of depression (15). Furthermore, increased workload has been associated with increased prescription of antidepressants (16).

However, after searching the Medline database the authors did not find any studies investigating how entering entrepreneurship affects the health of entrepreneurs and their relatives measured by the prescription of psychotropics. The authors examined the use of psychotropics on an individual level for entrepreneurs and their relatives the first two years after entering entrepreneurship by using data from government prescription and labor market databases.

METHODS

Participants

Use of psychotropics was mapped using the Danish Prescription Database, administered by Statistics Denmark and controlled by the Danish Medicines Agency. This database contains all drug prescriptions in Denmark from 1995 to 2003. Each prescription is listed with patient ID and contains information on volume and type of drug. Prescription data were linked with data from the Integrated Database for Labor Market Research (IDA) and the Entrepreneurship database.

The IDA database contains combined information on every person and firm in Denmark from 1980 to 2003 gathered from the official registers of the Danish government, which, because of its extensive welfare policies, records extremely detailed information on the population. The Entrepreneurship Database covers all new firms founded between 1995 and 2001 and includes data on the entrepreneurs of each new registered business.

The authors study the use of psychotropics among first time entrepreneurs who entered private sector entrepreneurship in the period from 1999 to 2001. The authors use a differences in differences

approach and match the 12,412 entrepreneurs with the closest (most similar) four individuals in the Danish population based on age, gender, home region, previous industry of employment (4-digit), wage (t-1), occupation level in the previous year, and education level. This gives us a matched sample of a total of 62,060 individuals.

The same approach was used to study the use of psychotropics among spouses of entrepreneurs. Spouses were matched with the four closest spouses in the population based on age, gender, home region, wage in the previous year, and education level. The authors matched 5,007 spouses (of the 12,412 above entrepreneurs) with 20,028 controls leaving us with a dataset of 25,035 individuals.

In both studies, the authors draw the controls from the pool of individuals who changed their job in the same period. This ensures that the authors do not capture effects associated with change in jobs in general, but the effects from entering entrepreneurship, more specifically. Also, both samples are limited to entrepreneurs and spouses who have not been entrepreneurs in the past and/or received psychotropics in the year before the founding. The aim is to see the effect of entering into entrepreneurship for the first time. Serial entrepreneurs were excluded because they are less likely to be affected by the transition. Persons receiving psychotropics the year before entering entrepreneurship were also excluded in order to eliminate confounding illness from prescription of the medication.

Measures

Drug types are classified according to the Anatomical Therapeutic Chemical (ATC) classification system which is maintained by the World Health Organization Collaborating Centre for Drug Statistics Methodology in Oslo, Norway. This database enables us to select the medication (by ATC-codes) which is typically associated with symptoms of occupational stress.

The following psychotropics were chosen: Benzodiazepines, benzodiazepine derivative (ATC: N05CF and N05BA, respectively) and antidepressants of the type selective serotonin reuptake inhibitors (SSRI) (ATC: N06AB).

Based on these types of medication, the authors choose the relevant prescriptions and create two dependent variables. A binary measure for whether the individual has received any medication (or not) within the calendar year, and a continuous measure for the total number of daily doses of these medication that each individual have received within the calendar year. The authors look at the stress-related medication together and separately.

Statistical analysis

Our sample is a matched case-control sample with four controls for each case. The authors use the statistical software STATA (Version 10) for sampling and analysis. The authors run logistic regressions with fixed effects (using the *xtlogit* procedure) on the sample groups, each consisting of one entrepreneur and four similar non-entrepreneurs. This enables us statistically to control for unobserved heterogeneity within sample groups which further isolates the entrepreneurship related difference within each group and strengthens the estimates. The authors should note that fixed effects regressions will not include sample groups, which do not have any variation on stress. Accordingly, the regressions only include sample groups with one or more prescriptions and not the groups where all or none of the group members get prescriptions.

RESULTS

Stress of entrepreneurs

Descriptive statistics for the analyzed population are shown in Table 1. The matched samples are closely related. The average age of entrepreneurs and their controls are 34 years and 74.8% of them

are male. The spouses of entrepreneurs and their controls are 35 years on average and 24.5% of them are male.

Table 1: Descriptive Statistics for the Analyzed Population

	Entrepreneurs		Controls		Spouses		Controls	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Age (years)	34.0	9.8	34.1	9.8	35.2	9.1	35.2	9.1
Men (percentage)	74.8%	0.4	74.8%	0.4	24.5%	0.4	24.5%	0.4
Relationship (percentage)	66.8%	0.5	63.6%	0.5	100.0%		100.0%	
No. of pre-school children	0.3	0.4	0.3	0.5	0.4	0.5	0.4	0.5
No. of school children	0.2	0.4	0.2	0.4	0.3	0.5	0.3	0.5
No. of employees	1.2	0.4			1.3	0.5		
N	12,412		49,648		5,007		20,028	

The authors examine the risk of receiving antidepressants, hypnotics and anxiolytics within the first year after founding a firm (Table 2). Two key variables are emphasized. First, a dummy variable (0,1) indicates for each individual whether it is an entrepreneur (=1). Second, the (naturally logged) number of employees in their business is added. With both variables in the same specification, the entrepreneur dummy variable represents the entrepreneurs with no employees besides themselves. The second variable represents the entrepreneurs with more than one employee. It is important to note that 90% of the entrepreneurs (11,167 individuals) belong to the first group of entrepreneurs with no employees in the first year.

Table 2: Fixed Effects Logistic Regression Predicting Prescription of Psychotics for Entrepreneurs

	Hypnotics/anxiolytics			Antidepressants (SSRI)		
	Odds ratio	95% CI	P	Odds ratio	95% CI	P
Entrepreneur	0.97	0.79-1.18	0.750	0.98	0.76-1.26	0.881
Size of business (logged)	1.14	0.79-1.66	0.478	1.28	0.88-1.87	0.204
Relationship	0.62	0.51-0.75	0.000	0.82	0.67-1.00	0.045
Pre-school children	0.74	0.57-0.94	0.015	0.77	0.60-0.97	0.030
School children	1.09	0.86-1.38	0.466	1.15	0.91-1.45	0.232

The authors find that entrepreneurs are significantly more likely to receive antidepressants (SSRI) in the first year if they run the firms themselves without employees. These entrepreneurs are 23% (odds ratio 1.23 [95% CI: 1.07-1.46], $P=0.024$) more likely than non-entrepreneurs to receive antidepressants. In the same specification, the authors further find a significant decreasing effect for entrepreneurs starting larger companies (0.41 [95% CI: 0.23-0.75], $P=0.024$). This shows that even though entrepreneurs are generally more likely to get stress, the likelihood is smaller for entrepreneurs running larger firm. There are no significant differences between entrepreneurs and their controls for hypnotics and anxiolytics.

Table 3: Fixed Effects Logistic Regression Predicting Prescription of Psychotics for Male Entrepreneurs

	Hypnotics/anxiolytics			Antidepressants (SSRI)		
	Odds ratio	95% CI	<i>P</i>	Odds ratio	95% CI	<i>P</i>
Entrepreneur	1.47	0.81-1.34	0.768	1.41	1.13-1.76	0.002
Size of business (logged)	0.94	0.58-1.51	0.795	0.37	0.17-0.81	0.013
Relationship	0.59	0.45-0.77	0.000	0.61	0.47-0.79	0.000
Pre-school children	0.86	0.63-1.18	0.343	0.96	0.72-1.28	0.800
School children	1.11	0.82-1.49	0.504	0.93	0.69-1.23	0.602

The authors investigate this finding further by dividing our sample of entrepreneurs and their controls into male and female entrepreneurs (Table 3 and 4, respectively). The authors find that male entrepreneurs are more likely to receive antidepressants in the first year compared to their male control groups if they start without employees (1.41 [95% CI: 1.13-1.76], $P=0.002$). In addition, the authors find that entrepreneurs with larger companies are less likely to get stress (0.37 [95% CI: 0.17-0.81], $P=0.013$).

There are no significant differences between female entrepreneurs and their control group for antidepressants. Also, there are generally no differences between entrepreneurs of any gender and their control groups for hypnotics and anxiolytics. The authors have investigated all these effects for the second year and find no significant relationships between the use of this medication and becoming an

entrepreneur. However, entrepreneurs already treated with psychotropics in the first year have a high likelihood of also being on the medication in the second year (177.20 [95% CI: 123.05-255.19], $P=0.0001$).

Table 4: Fixed Effects Logistic Regression Predicting Prescription of Psychotropics for Female Entrepreneurs

	Hypnotics/anxiolytics			Antidepressants (SSRI)		
	Odds ratio	95% CI	<i>P</i>	Odds ratio	95% CI	<i>P</i>
Entrepreneur	0.85	0.61-1.19	0.343	0.97	0.72-1.31	0.838
Size of business (logged)	1.71	0.90-3.28	0.103	0.48	0.19-1.20	0.118
Relationship	0.63	0.47-0.85	0.002	0.79	0.60-1.05	0.108
Pre-school children	0.56	0.37-0.85	0.007	0.78	0.55-1.09	0.143
School children	1.06	0.73-1.56	0.745	1.18	0.84-1.65	0.345

Stress of entrepreneurs' spouses

It is clear that the health of entrepreneurs is affected by the decision to enter entrepreneurship. The decision increases the likelihood of depression by about 23% compared to similar individuals if they found a company alone. The authors investigate how entry into entrepreneurship affects the spouses of individuals making the transition.

Table 5: Fixed Effects Logistic Regression Predicting Prescription of Psychotropics for Spouses of Entrepreneurs

	Hypnotics/anxiolytics			Antidepressants (SSRI)		
	Odds ratio	95% CI	<i>P</i>	Odds ratio	95% CI	<i>P</i>
Spouse of entrepreneur	1.40	1.04-1.86	0.024	1.40	1.06-1.85	0.019
Size of business (logged)	0.86	0.50-1.49	0.593	0.60	0.34-1.07	0.081
Pre-school children	0.63	0.43-0.91	0.015	0.79	0.57-1.08	0.135
School children	0.70	0.50-0.98	0.040	0.94	0.69-1.27	0.682

The likelihood that spouses suffer from their husbands or wives becoming entrepreneurs is reported in Table 5. In the first year, the authors find that spouses of entrepreneurs (starting businesses on their own) are 40% more likely to get hypnotics and anxiolytics (1.40 [95% CI: 1.04-1.86], $P=0.024$) and antidepressants (1.40 [95% CI: 1.06-1.85], $P=0.019$) compared to spouses of non-entrepreneurs. The

authors only find a significant reducing effect for entrepreneurs with larger businesses when looking at antidepressants (0.60 [95% CI: 0.34-1.07], $P=0.081$). The effects fade off in the second year where there are not any difference between spouses of entrepreneurs and spouses of non-entrepreneurs.

The authors further investigate these findings on spouses by dividing the sample into male and female spouses and repeating the analysis (Table 6 and 7, respectively). The authors find that female spouses of entrepreneurs (with no employees) are 33 and 45% more likely to receive hypnotics/anxiolytics (1.33 [95% CI: 0.96-1.85], $P=0.085$) and antidepressants (1.23 [95% CI: 1.07-1.97], $P=0.017$), respectively. In addition, spouses of entrepreneurs are less likely to receive antidepressants (0.47 [95% CI: 0.23-0.96], $P=0.038$) if their partner founds a company with employees.

Table 6: Fixed Effects Logistic Regression Predicting Prescription of Psychotics for Male Spouses of Entrepreneurs

	Hypnotics/anxiolytics			Antidepressants (SSRI)		
	Odds ratio	95% CI	<i>P</i>	Odds ratio	95% CI	<i>P</i>
Spouse of entrepreneur	1.69	0.90-3.16	0.101	1.18	0.57-2.41	0.659
Size of business (logged)	1.71	0.65-4.48	0.275	1.38	0.46-4.14	0.569
Pre-school children	0.96	0.45-2.03	0.916	0.60	0.27-1.38	0.228
School children	0.84	0.41-1.72	0.632	1.05	0.51-2.19	0.892

Table 7: Fixed Effects Logistic Regression Predicting Prescription of Psychotics for Female Spouses of Entrepreneurs

	Hypnotics/anxiolytics			Antidepressants (SSRI)		
	Odds ratio	95% CI	<i>P</i>	Odds ratio	95% CI	<i>P</i>
Spouse of entrepreneur	1.33	0.96-1.85	0.085	1.45	1.07-1.97	0.017
Size of business (logged)	0.61	0.28-1.30	0.202	0.47	0.23-0.96	0.038
Pre-school children	0.53	0.35-0.83	0.005	0.82	0.58-1.15	0.251
School children	0.69	0.47-1.01	0.056	0.91	0.64-1.27	0.567

There is no significant difference between male spouses of entrepreneurs and their respective controls. This is likely to be due to the smaller sample of male spouses. The magnitude of the estimates for males on hypnotics/anxiolytics is higher than for females, which would indicate that significant and

stronger effects could be possible with a larger sample of male spouses. In all specifications, there are no differences on the second year effects.

DISCUSSION

This is the first study with a large sample size investigating the direct effect of entering entrepreneurship on prescription of psychotropics. The major finding of this study is that entrepreneurs founding businesses alone are more likely to receive psychotropics than persons changing to another job. Spouses of these entrepreneurs have an even higher risk of receiving psychotropics than matched controls. These results suggest that entering entrepreneurship has a significant effect on the health of not only entrepreneurs but also their spouses.

Mean age was 34 and 75 % of the entrepreneurs were males and this is consistent with other studies (1;17;18). Entrepreneurs were more likely to receive antidepressants whereas spouses of entrepreneurs more often received both hypnotics and antidepressants. Antidepressant medication has several indications, e.g. depression, anxiety and obsessive-compulsive disorder and since no data on indication were available, it is not possible to relate the increased use to any particular symptoms or disease (19). However, antidepressants do not have indications for stress or the less severe forms of depression which might be the most likely diagnosis in most of these cases. Also the benzodiazepines have several indications, e.g. anxiety and insomnia (20). Furthermore, the limitation of registers should also be noticed. Even though the medication is prescribed, there are no guarantees that patients actually take the medication. In extreme cases, they might even pass it on to family members or sell it (21;22).

The increased use of antidepressants and hypnotics was most profound the first year after entering entrepreneurship and declined the second year. This might be due to adaptation to being an entrepreneur for those who succeed. However, the authors also found that entrepreneurs receiving antidepressants in the first years were also extremely likely to do so in year two. This might suggest

that entering entrepreneurship is a long-term stress condition. Alternatively, it can be explained by treatment principles, e.g. medication is not discontinued within the first year.

Even though the time from registering a company until the first prescription is rather short in this study, it is worth emphasizing that the efforts to start up firms begin long before the registration date (23). Planning and registering an entry into entrepreneurship is a complicated and resource consuming process, which is initiated long before the registration date. This suggests that the build-up of stress might have been going on for some time when the firm is registered.

The generalizability of these findings is unclear and generalization should only be done with caution because of differences in guidance of entrepreneurs and health care systems between countries. In some countries entering entrepreneurship leads to loss of health insurance which complicates generalization. In Denmark, all inhabitants have public health insurance and therefore the results show the more direct effect of entering entrepreneurship.

Since this study is observational, the authors cannot make any clear explanation for the increased use of psychotropics among entrepreneurs and their spouses. The prevalence of mental problems among the study population might be underestimated because entrepreneurs might be less prone to seek medical help due to an increased workload and stress (24). Furthermore, use of over-the-counter stress related medications, consumption of alcohol or illicit drugs were not included in the study.

Female entrepreneurs seem to have a lower risk of receiving psychotropics, and this might be explained by the fact that females tend to have a less financial risk taking behavior, or they simply might start different type of business than male entrepreneurs (25;26).

The authors find stronger effects for spouses than for entrepreneurs. It has previously been found that lack of control over a situation, which has large consequences for a person without control, can lead to

health problems (27;28). Spouses are affected by the decision to enter entrepreneurship, but have limited control and information about the situation. This could explain the larger effect on spouses.

The authors find that the number of employees in the business has a reducing effect on the likelihood of medication for entrepreneurs. Larger number of employees in the first years is often viewed as an indicator of success and lowers the risk of failure for the entrepreneur (7). The more employees the entrepreneur has in the first year, the lower the risk of stress and the lower the risk of firm failure.

These findings should lead to more focus on the mental health of new entrepreneurs and their spouses. Further, improved guidance on how to enter entrepreneurship and manage the challenges during the first years might be beneficial for entrepreneurs, the spouses, and also the survival rate of the company. Mental problems of this sort are likely also to hurt the entrepreneurs' abilities to run their business.

FUNDING

This work was funded by the Department of Business Studies, Aalborg University.

REFERENCES

- (1) Delmar F, Davidsson P. Where do they come from? Prevalence and Characteristics of Nascent Entrepreneurs. *Entrepreneurship and Regional Development* 2008;12(1):1-23.
- (2) Hytti U. New meanings for entrepreneurs: from risk-taking heroes to safe-seeking professionals. *Journal of Organizational Change Management* 2005;18(6):594-611.
- (3) Jalovaara M. Socio-economic status and divorce in first marriages in Finland 1991-93. *Population Studies* 2001;55(2):119-33.
- (4) Harris JA, Saltstone R, Fraboni M. An evaluation of the job stress questionnaire with a sample of entrepreneurs. *Journal of Business and Psychology* 1999;13(3):447-55.
- (5) Verheul I, Thurik R. Start-Up Capital: "Does Gender Matter?". *Small Business Economics* 2001;16:329-45.
- (6) Taylor MP. The survival of the fittest: an analysis of self-employment duration in Britain. *The Economic Journal* 1999;109:140-55.
- (7) Dahl M, Reichstein T. Are you experienced? Prior experience and the survival of new organizations. *Industry and Innovation* 2007;14(5):497-511.
- (8) Freeman J, Carroll GR, Hannan MT. The Liability of Newness: Age Dependence in Organizational Death Rates. *American Sociological Review* 1983;48:692-710.
- (9) Kivimaki M, Honkonen T, Wahlbeck K, Elovainio M, Pentti J, Klaukka T et al. Organisational downsizing and increased use of psychotropic drugs among employees who remain in employment. *J Epidemiol Community Health* 2007 February;61(2):154-8.

- (10) Kivimaki M, Vahtera J, Pentti J, Ferrie JE. Factors underlying the effect of organisational downsizing on health of employees: longitudinal cohort study. *BMJ* 2000 April 8;320(7240):971-5.
- (11) Westerlund H, Ferrie J, Hagberg J, Jeding K, Oxenstierna G, Theorell T. Workplace expansion, long-term sickness absence, and hospital admission. *Lancet* 2004 April 10;363(9416):1193-7.
- (12) Krantz G, Berntsson L, Lundberg U. Total workload, work stress and perceived symptoms in Swedish male and female white-collar employees. *Eur J Public Health* 2005 April;15(2):209-14.
- (13) Rugulies R, Bultmann U, Aust B, Burr H. Psychosocial work environment and incidence of severe depressive symptoms: prospective findings from a 5-year follow-up of the Danish work environment cohort study. *Am J Epidemiol* 2006 May 15;163(10):877-87.
- (14) Checkley S. The neuroendocrinology of depression and chronic stress. *Br Med Bull* 1996 July;52(3):597-617.
- (15) Melchior M, Caspi A, Milne BJ, Danese A, Poulton R, Moffitt TE. Work stress precipitates depression and anxiety in young, working women and men. *Psychol Med* 2007 August;37(8):1119-29.
- (16) Virtanen M, Honkonen T, Kivimaki M, Ahola K, Vahtera J, Aromaa A et al. Work stress, mental health and antidepressant medication findings from the Health 2000 Study. *J Affect Disord* 2007 March;98(3):189-97.
- (17) Harada N. Who succeeds as an entrepreneur? An analysis of the post-entry performance of new firms in Japan. *Japan and the World Economy* 2003;15:211-22.
- (18) Bennett R, Dann S. The Changing Experience of Australian Female Entrepreneurs. *Gender, Work and Organization* 2000;7(2):75-83.

- (19) Trifiro G, Barbui C, Spina E, Moretti S, Tari M, Alacqua M et al. Antidepressant drugs: prevalence, incidence and indication of use in general practice of Southern Italy during the years 2003-2004. *Pharmacoepidemiol Drug Saf* 2007 May;16(5):552-9.
- (20) Lader M. Effectiveness of benzodiazepines: do they work or not? *Expert Rev Neurother* 2008 August;8(8):1189-91.
- (21) Byrne N, Regan C, Howard L. Administrative registers in psychiatric research: a systematic review of validity studies. *Acta Psychiatr Scand* 2005 December;112(6):409-14.
- (22) Parker G. Register now: validity later. *Acta Psychiatr Scand* 2005 December;112(6):407-8.
- (23) Sørensen JB, Sorenson O. From conception to birth: Opportunity perception and resource mobilization in entrepreneurship. *Advances in Strategic Management* 2003;20:89-117.
- (24) Cameron L, Leventhal EA, Leventhal H. Seeking medical care in response to symptoms and life stress. *Psychosom Med* 1995 January;57(1):37-47.
- (25) Barber BM, Odean T. Boys will be boys: Gender, overconfidence and common stock investment . *The Quarterly Journal of Economics* 2001;116(1):261-92.
- (26) Powell M, Ansic D. Gender differences in risk behaviour in financial decision-making: An experimental analysis. *Journal of Economic Psychology* 1997 November 1;18(6):605-28.
- (27) McEwen BS. Protective and damaging effects of stress mediators. *The New England Journal of Medicine* 1998 January 15;338(3):171-9.
- (28) Wieclaw J, Agerbo E, Mortensen PB, Burr H, Tuchsén F, Bonde JP. Psychosocial working conditions and the risk of depression and anxiety disorders in the Danish workforce. *BMC Public Health* 2008;8:280.