

**UvAPro PhD Survey 2015:
Are UvA PhD candidates at risk of depression?**

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Introduction

In 2014, the Graduate assembly of the University of California, Berkley, investigated the well-being of their graduate students¹. This investigation led to the shocking finding that many of the graduate students scored high on a depression questionnaire. In addition, European countries such as Belgium have indications that one in three PhD candidates are coping with mental health problems such as depression².

This led the PhD council of the University of Amsterdam (UvAPro) to incorporate the items from the depression questionnaire in their annual survey of 2015. This report portrays the main findings. Because the depression questionnaire was part of UvAPro Survey, we were able to subdivide the results on the basis of demographic and administrative differences.

In sum, the depression questionnaire shows that there are indications that a large subsection of UvA's PhD community in general is at risk of being clinically depressed, even more so when certain subdivision are made on the basis of for example faculty, gender and financial sustainability. The CES-D questionnaire that was used is not sufficient however to establish a diagnosis of depression. In the field of clinical psychology this questionnaire is used as a screening tool which in case of results like these warrants further investigation into the possible presence of depression.

Methods

Participants

The annual survey was emailed to all UvA PhD candidates (N = 1360) of whom 55% responded. Of these respondents 433 fully completed the depression questionnaire. The respondents were distributed among the different faculties as expected on the basis of the number of PhD candidates that are registered per faculty. Together with the response rate, this suggests that the sample is representative of the UvA PhD candidate population, with the faculties of Law and Humanities being slightly underrepresented.

Table 1: Respondents per faculty

ACTA	FdR	FNWI	FMG	FGw	FEB
14	24	170	102	87	36
40%	26%	40%	41%	29%	39%

1 Report retrievable from: http://ga.berkeley.edu/wp-content/uploads/2015/04/wellbeingreport_2014.pdf

2 <https://www.vlaamsparlement.be/commissies/commissievergaderingen/1011068/verslag/1013225>

Procedure

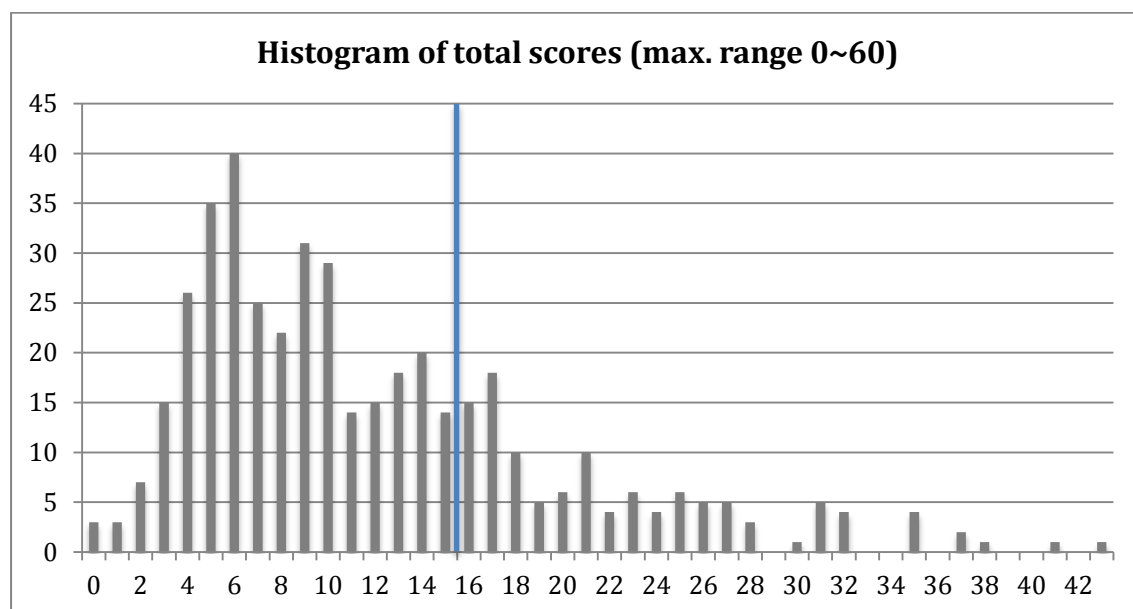
To maximize participation, we raffed two presentation pointers and we sent regular reminders. We sent a reminder after one week; and the second and final reminder the week thereafter.

Materials

The depression questionnaire used is the CES-D, developed by the Center for Epidemiologic Studies Depression Scale (Radloff, 1977). This questionnaire has been extensively validated, standardized, used in different settings and is renowned in the field of psychiatric epidemiology (Nezu, Nezu, McClure, & Zwick, 2002). It scores high on reliability estimates (α between .85 and .90) (Radloff, 1977). The questionnaire consists of 20 questions on feelings of happiness and sadness (see appendix A for items and scoring). The total score ranges from 0 to 60 with a higher score being more indicative of depression. The cut-off score that distinguishes best between healthy and depressed samples is at or above 16. If the questionnaire is given to a random sample of people it is expected to see 19% of that sample score at or above this threshold (Radloff, 1977). This report will give the results as the percentage of PhD candidates that score above this cut-off, with 19% thus being the 'normal' benchmark.

Summary

In the current sample of UvA PhD candidates we found that 36.5% of people scored above the threshold (i.e. 16 or higher), which is almost twice as frequent as the normal benchmark (19%).



In order to gain more insight into why this is the case we have subdivided the general sample by faculty, gender, Dutch or international candidates, contract duration, frequency of supervision and financial difficulties. We also considered an age effect, but found no distinguishable pattern.

Faculty

We find large difference between faculties (see Results by faculty). While the PhD candidates at the Dentistry and Law faculty appear to score close to the general threshold, the percentage of PhD candidates that score above the threshold is much higher at the other faculties. PhD candidates at these faculties are at risk of depression twice as much as in the general population. These differences call for further investigation, as have little insight into the background of these findings.

Gender

Both men and women PhD candidates score above the threshold (see Results by gender). However, the percentage of women showing to be at risk of depression is around 40% while it is 31% for men. The 2014 Berkeley Survey cited earlier did not find this gender gap. This

begs the question whether female PhD candidates at the UvA are more susceptible to be suffering from depression, or whether the results should be interpreted differently for men and women.

Starting year

We find some interesting trends based on the starting year of PhD candidates (see Results by starting year of PhD project). PhDs having started in 2013 show more indications of risk of depression than those who started after them (i.e. the risk increases over time). Interestingly, the percentage drops for those having started in 2012. PhD candidates who started before 2012 again show an increase. The most important question this raises is why signs of depression appear to increase over the course of a PhD, and how these can best be dealt with.

Financial sustainability

PhD candidates who report having more problems sustaining themselves financially, are also more likely to show signs of depression (see Results by difficulty to financially sustain themselves). Of PhD candidates who report having difficulty financially sustaining themselves, 45% show signs of being at risk of depression. These PhD candidates are thereby at risk of having to deal with multiple problems, which could jeopardise their progress as well as their health.

Links to UvA Employee Monitor

The UvA Employee Monitor was administered several weeks before the UvAPro Survey. The monitor was also administered in 2008, 2011, 2012, and 2014. The monitor probes employees on their work-pressure and work-experience. Most answers by PhD candidates on these topics are similar to their colleagues in other functions. Through the years, desired work pressure is typically graded between 6,5 and 6,0; as it is by others working in the university. Experienced work pressure is generally graded between 6,5 and 7,0 by PhD candidates, which is half a point lower than the grade given by other employees. Another most notable difference is that 60 to 70% of PhD candidates report working more hours than contractually obliged, versus 50 to 60% of other personnel. The Employee Monitor thus provides indications that a large proportion of PhD candidates experience high work pressure. However, pressure seems even higher for other members of personnel. The problems of being at risk of depression therefor need not be limited to PhD candidates.

Other investigated relations

Beside the relations described above we also considered difference between Dutch and international PhD candidates (see Results by Dutch or international candidates), differences between 3-year or 4-year contract (see Results by contract duration), and by frequency of meeting with their supervisor (see Results by supervision frequency), but found no clear differences based on these criteria.

Conclusions & recommendations

A large percentage of PhD candidates score above the threshold on the CES-D questionnaire, over one in three PhD candidates shows signs of begin at risk of depression. There appear to be differences between faculties and PhD candidates' background, but the problem does not appear to isolate to a certain group.

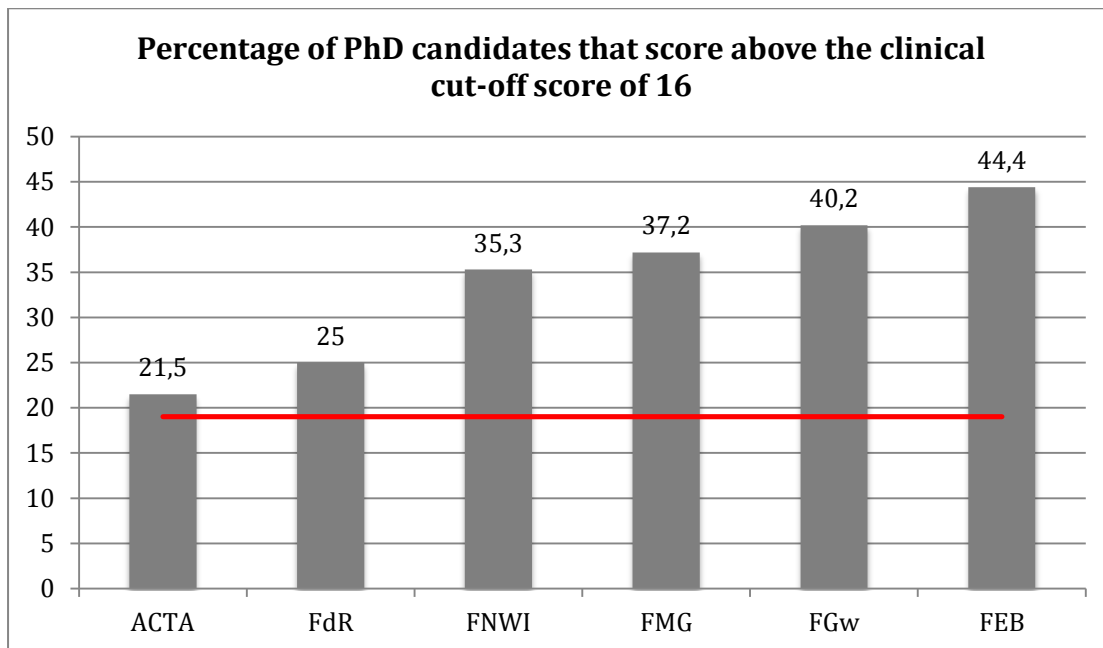
While the questions included in the UvAPro Survey provide indications that PhD candidates may be experiencing emotional difficulties during their PhD, the data are inclusive as to what problems PhD candidates are experiencing, what causes these problems, and what structural solution can and ought to be offered. We therefore make the following recommendations:

- 1) Generate awareness amongst PhD candidates and supervisors that depression poses serious problems, and these ought to be addressed. Supervisors should be able to provide support and direct a PhD candidate to additional help if necessary.
- 2) The company doctor can offer (confidential) support for both physical and emotional issues. To the best of our knowledge only the Law faculty also provides a PhD-Dean. We believe PhD candidates are often not aware of these supporting structures, and these should be communicated more directly to them. We propose including information on these in a 'welcome package'.
- 3) There is currently insufficient insight into the mental health problems PhD candidates are experiencing. We propose PhD candidates be included in the survey the UvA is currently setting up by student doctors into the emotional well-being of students, or that a separate specialist study be conducted. The results from our survey call for more inquiry into the mental health of PhD candidates.
- 4) It is unclear whether supporting facilities are also available to external PhD candidates. We propose that the aforementioned recommendations also apply and be made available to them.

Results

Results by faculty

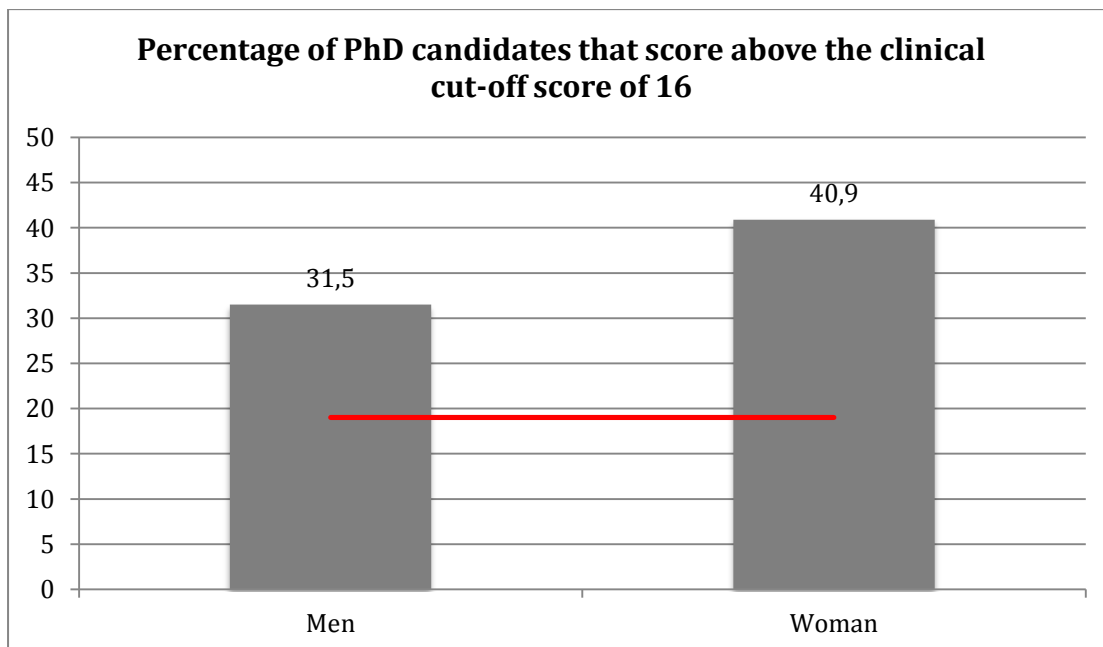
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Red line indicates the 19% benchmark of general people that score above the clinical cut-off .

Results by gender

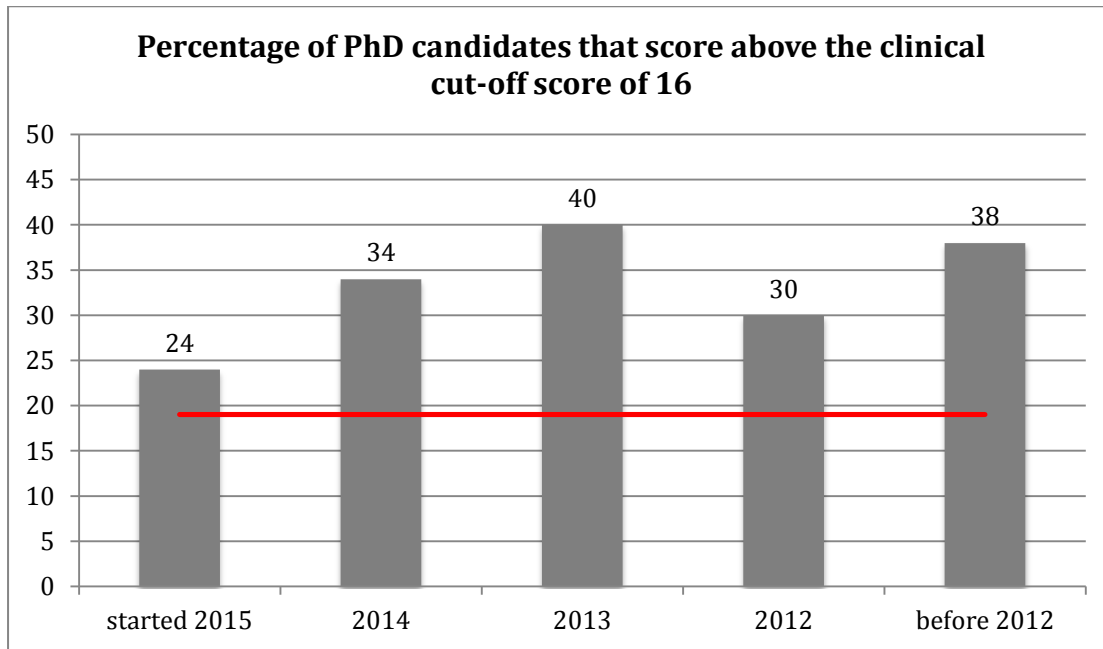
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Red line indicates the 19% benchmark of general people that score above the clinical cut-off .

Results by starting year of PhD project

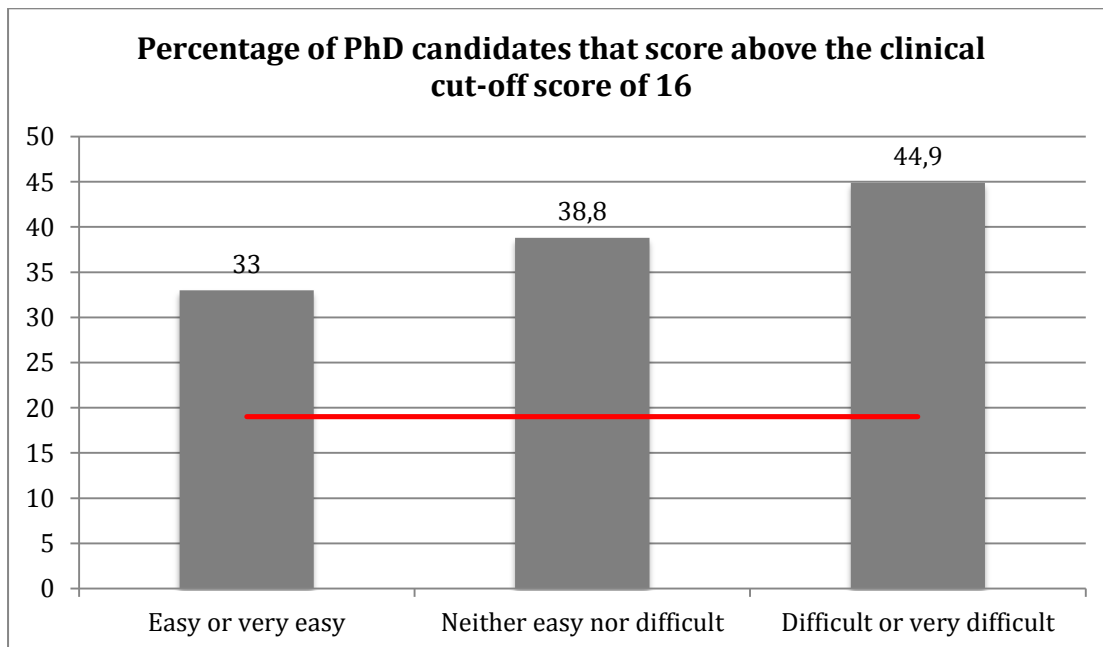
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Red line indicates the 19% benchmark of general people that score above the clinical cut-off.

Results by difficulty to financially sustain themselves

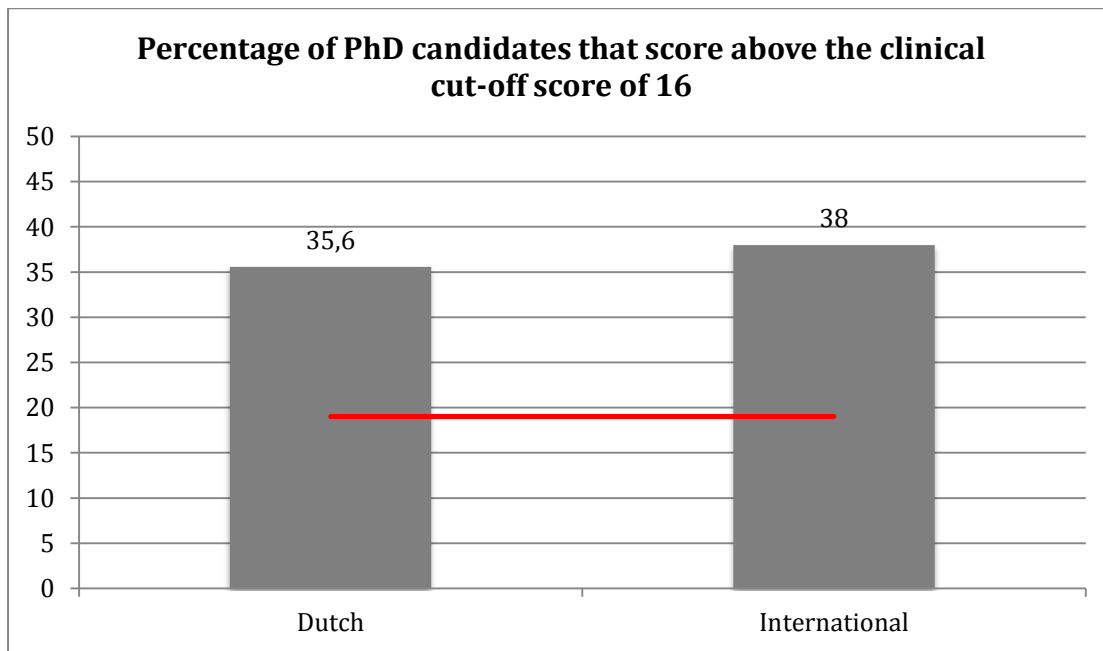
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Red line indicates the 19% benchmark of general people that score above the clinical cut-off.

Results by Dutch or international candidates

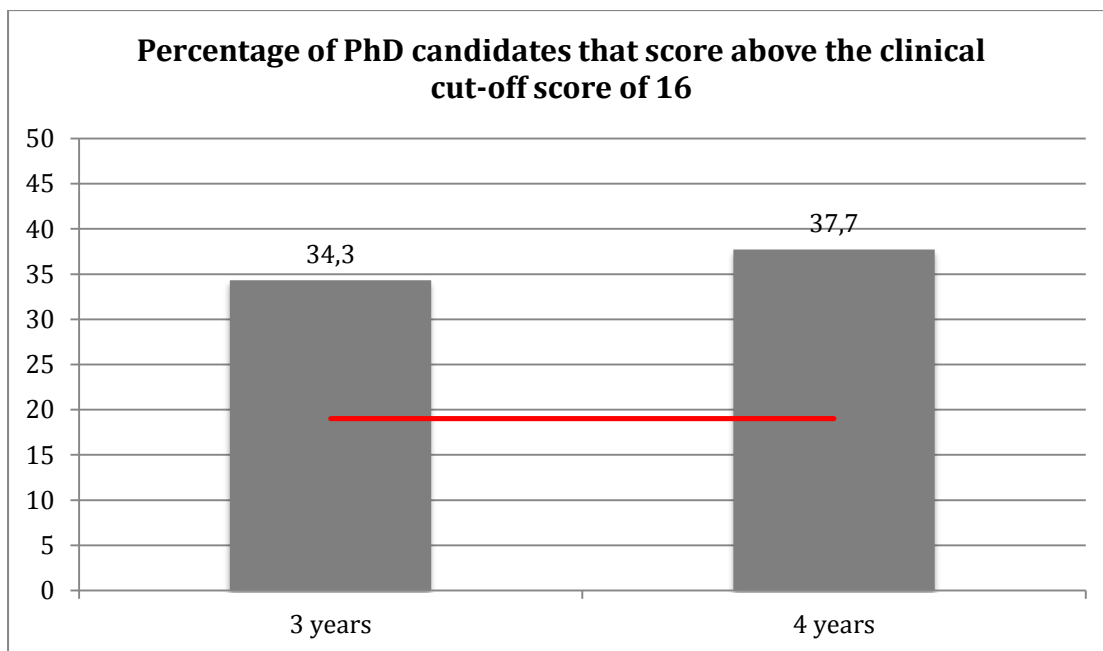
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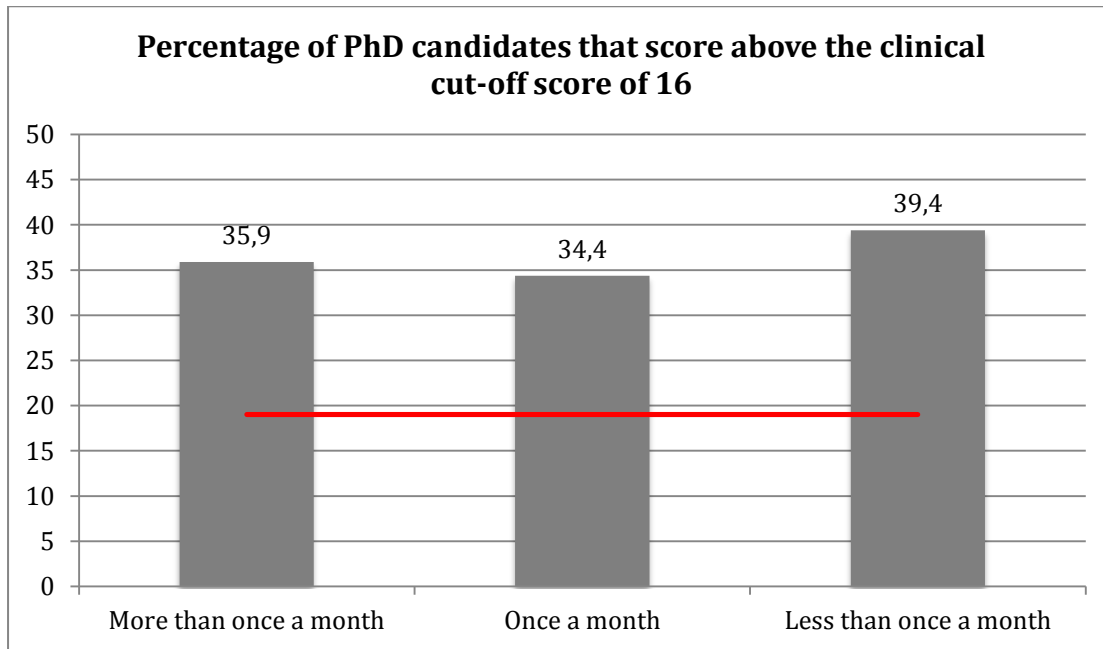
Red line indicates the 19% benchmark of general people that score above the clinical cut-off .

Results by contract duration

above



Red line indicates the 19% benchmark of general people that score above the clinical cut-off.



References

Radloff LS. The CES-D scale: a self-report depression scale for research in the general population. *Applied Psychological Measurement*. 1977;1:385-401.

Nezu AM, Nezu CM, McClure KS, Zwick ML. Assessment of depression. In: Gotlieb IH, Hammen CL, eds. *Handbook of depression and its treatment*. New York, NY: Guilford Press; 2002:61-85.

Appendix A: CES-D items and scoring

Below is a list of some of the ways you may have felt or behaved. Please indicate how often you have felt this way during the past week by selecting the appropriate response in the corresponding row.

I was bothered by things that usually don't bother me.

I did not feel like eating; my appetite was poor.

I felt that I could not shake off the blues even with the help from my family or friends.

I felt that I was just as good as other people. (REVERSED SCORING)

I had trouble keeping my mind on what I was doing.

I felt depressed.

I felt that everything I did was an effort.

I felt hopeful about the future. (REVERSED SCORING)

I thought my life had been a failure.

I felt fearful.

My sleep was restless.

I was happy. (REVERSED SCORING)

I talked less than usual.

I felt lonely.

People were unfriendly.

I enjoyed life. (REVERSED SCORING)

I had crying spells.

I felt sad.

I felt that people dislike me.

I could not get "going".

Answer possibilities:

- | | |
|--|-----------|
| <input type="radio"/> Rarely or none of the time (less than 1 day) | [SCORE 0] |
| <input type="radio"/> Some or a little of the time (1-2 days) | [SCORE 1] |
| <input type="radio"/> Occasionally or a moderate amount of the time (3-4 days) | [SCORE 2] |
| <input type="radio"/> All of the time (5-7 days) | [SCORE 3] |