Mental well-being of PhD candidates at Leiden University

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Mental health of PhDs – What do we know?

<2013: Anecdotal information

2014: Study among wellbeing graduate students at University of California, Berkeley

2015: OECD report: PhDs are reluctant to talk about it and seek for help
   – Fear of the stigma
   – Expected negative importance on one’s future career

2016: Study among PhD candidates UvA (Amsterdam)

2015-17: Mental health study among PhD candidates from 5 universities in Flanders
Research Aims

- Collect systematic empirical data on mental health of PhD candidates in Leiden University
- Assess the scope of the problem by comparing with other samples / groups
- Better understand how the (perceptions of) academic environment may relate to mental health

Project Design spring-summer 2016 together with ECOOM Ghent
Organization of academic research

- Increased workloads (e.g. Shen 2015)
- Increased pressures to publish and acquire grants (e.g. Waaijer et al 2017)

Careers in Academia:
- limited career prospects
- limited job security
- increased competition
- ‘excellence’ norm
Methods

• **Online Questionnaire**  
  *October-December 2016*
  
  - Topics: PhD candidates’ contractual situation, tasks, autonomy, supervision, leadership and career opportunities. Work-life balance, workload and mental health (GHQ)
  
  - Questions corresponded with those previously used by ECOOM Survey of Junior Researchers (SJR; *ECOOM, 2013*)

• **12 Interviews**  
  *February-March 2017*

*Data collection October 2016-March 2017*
General Health Questionnaire

- Most widely used instrument / screening in occupational health research
- 12 items
- 4 pt likert scale / coding scheme 0-0-1-1
- At risk: minimal number of 4 symptoms [GHQ4+]
- Used in UK and Australia studies of academic staff
  (e.g. Winefield et al 2003; Kinman and Jones 2008)
Example item GHQ questionnaire

Q. How have you been feeling the last few weeks?

*Please report your current problems, not those you might have had in the past.*

<table>
<thead>
<tr>
<th>Been able to concentrate on whatever you are doing</th>
<th>Better than usually</th>
<th>Just as good as usually</th>
<th>Worse than usually</th>
<th>A lot worse than usually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coding 0</td>
<td>Coding 0</td>
<td>Coding 1</td>
<td>Coding 1</td>
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Characteristics of Respondents

- 283 PhD candidates
- 56% female / 44% male
- Average age: 31 years
- 60% Dutch nationality
- 75% Partner
- 18% Children
- 71% job contract Leiden University
Prevalence of mental health problems (1)

- 47% Constant Stress
- 32% Unhappy & Depressed
- 32% Lost sleep
- 31% Not Overcome Difficulties
- 31% Lost Concentration
- 28% Lost Self-confidence
Prevalence of mental health problems (2)

- 26% Not enjoying activities
- 24% Not Happy, all things considered
- 23% Not playing a useful role
- 21% Could not make decisions
- 20% Could not face problems
- 15% Felt worthless
## Prevalence of mental health problems: compared to three comparison groups

<table>
<thead>
<tr>
<th>Group</th>
<th>GhQ4+</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD Candidates Leiden University</td>
<td>38%</td>
</tr>
<tr>
<td>PhD Candidates Flanders (n=3659)</td>
<td>32%</td>
</tr>
<tr>
<td>Higher Education Students in Flanders (n=333)</td>
<td>22%</td>
</tr>
<tr>
<td>Highly Educated Employees in Flanders (n=769)</td>
<td>12%</td>
</tr>
</tbody>
</table>
Risk factors (1)

- Work pressure / load
- Problems dealing with work pressure
- Negative view on career perspectives in academia
"And then you're going to feel guilty about having reached less than a few weeks ago when you worked there ... And at some point, instead of a motivation that pushes you, it becomes the guilt that pulls. And then it starts to become very harmful. .. Certainly, when I was at the end of my second year, when there was no paper... the lab experiments all fail. There was not even a view of something that was publishable or a result. I did not feel really strong or smart enough for that ... Then I really thought of ... where does it go anyway? What else can I do? ” (respondent 8)
Risk factors (2)

- Not satisfied with supervision
  
  39 PhD candidates are very unsatisfied with their supervisors; 54% is GHQ4+

- Receiving not enough social support from supervisors

- 43% thinks about quitting PhD research
  - n=83: few times during the year: 44.6% GHQ4+
  - n=19: more than once a month: 89.5% GHQ4+
  - n=133: never: 27.8% GHQ4+
"... what the requirements (of the PhD thesis)..the regulations are vague about that. And I understand that, because the differences between faculties are very large. But because of this.. you sometimes hear from one professor what the requirements are and then your supervisor says these are the requirements. And both fit in the doctoral regulations, but that makes a difference whether you should write 3 or 5 articles. In the end..now it's clear.. but considerable time it has been very unclear" (respondent 3)
Risk factors (3)

Socio Demographics

• International PhD candidates
  – Limited knowledge about Dutch system
  – Culture differences
  – Feeling of loneliness
  – Social adaptation

• PhD candidates with kids
“But this is something about the Dutch system. I mean, when I came, I didn't know that I should have applied for NWO scholarship instead of the one I applied for. It was my own decision, I didn't know what my decision would imply. I didn't know, because I thought it was the same, being financed by Portugal or by Holland. And apparently there is a big difference. Either you are in NWO, or you cannot teach for instance. [...]. That I didn't know as a guest PhD researcher…I didn't even know my title was guest. No, nothing was clear. All international students say this about Holland. You learn day by day. And nobody tells you anything, nobody. And you have to figure it out.”

(Respondent 12)
No relationship with GhQ4+

• Gender PhD candidate
• Type of Appointment
  
  employee status, grant, self-funded PhD candidates
• Experienced Autonomy in PhD project
• Work-life balance
• Charismatic Leadership Supervisor
Conclusion

• 38% of the PhD candidates in Leiden report at least four symptoms at the GHQ-12 and are at risk of having or developing a common psychiatric disorder (especially depression)

• Most prevalent (top 3) are feelings of: being under constraint stress, unhappiness and depression, and sleeping problems due to worries

• Work context variables are predictors as well as nationality
Our Recommendations

Graduate schools/Faculty board/CvB:

1. Appoint an independent psychologist especially for PhD candidates;

2. Career coaching for both non-academic and academic careers, including the development of transferable skills;

3. Establish a supervision team for international PhD candidates;
Our Recommendations

Supervisors:

1. **Attend supervisor training program**, including a focus on identifying mental health problems and cross-cultural communication;

2. **Be transparent** with regard to the requirements PhD candidates must meet. *Making the implicit explicit is vital for all PhDs*

3. **Careers**: After a PhD all knowledge-intensive jobs are open. An academic career *is just one of them*
Our Recommendations

PhD candidates:

1. Let’s talk...and seek help
2. Build independent PhD mentoring / intervision groups
3. Decrease career stress: start thinking of life after PhD in early phase
In practice: changes within Leiden University

• **Consultation** in case of psychological issues:
  – Consult one of the university doctors (‘bedrijfsarts’). He/she can refer you to a psychologist
  – Consult the confidential counsellor

• **Yearly annual review talk** with 1-2 independent staff members. Quality of supervision is essential topic. Need to be registered in Converis.

• **Training situational leadership recommended** for new supervisors
Future Plans

• National project
  – Extension to other universities in NL
  – Intervention study and monitoring in collaboration with UvA

• International project: data collection in 3 countries
  – ECOOM, Belgium: Data from 5 Flemish universities [2018]
  – VITAE, UK: Data from 10 universities is UK [ongoing]
  – CWTS, NL: Data from Leiden

  Possible 4th country: Germany [2019]

• Establish international network of scholars in collaboration with EURODOC

• Outreach activities: presentations / lectures
  – April 2018. Keynote at EURODOC conference (Tampere, Finland)