

### The Ph.D. Personality Questionnaire: a HRM tool for the coaching and selection of Ph.D. candidate







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## Problems related to Ph.D. students

- Succes rates (delay and drop out) need improvement
- Selection needs to be improved
- Lack of coaching
- Human resource management needs
   improvement
- Also see "vragenlijst krikt aantal promoties op": interview with René Butter in Erasmus Magazine of June 12, 2008 (downloadable at www.rbpa.nl)



## Ph.D. Personality Questionnaire

- Web-based
- Scientifically validated: (see paper presented at the 23trd Annual Conference of the Society for Industrial and Organizational Psychology in April 2008: (downloadable at www.rbpa.nl).
- Concise report that can be used to better aim and personalize selection and coaching interviews
- Abt. 60 contextualized questions validated in English
- Better prediction than general instruments
- See productfile



# Construction of an ecological personality instrument for Ph.D. candidates

- Practical question in The Utrecht School of Governance: "can you help us with the personality part?"
- Qualitative research among various stakeholders
- Derive test items (Big 5 type structure)
- Construct a 0-version of the instrument (PPQ: Ph.D. Personality Questionnaire)
- Get feedback from the users
- Validation study



# Ecological scale item: PhD personality questionnaire

5	I want to obtain my PhD because I want to improve my research skills		I want to obtain my PhD in order to have more opportunities on the job market	
	0	0	0	0



### **PPQ** dimensions

- Networking & presentation
- Time management
- Research drive
- Independence & coping with criticism
- Co-operation and openness to feedback



René Butter psychologisch advies Universiteit Utrecht Profile on the PPQ questionnaire for Time management Candidate 1.71 Benchmark min: 1.43, mean: 2.80 max: 4.00 Has a short time horizon on the research work. Prefers global deadlines preferably set by the supervisor, and has a flexible attitude in meeting these. Finds it difficult to persevere and keep focused, especially in busy circumstances. Prefers to work on many different, interesting subjects at the same time. Is open to unplanned events, may follow own interests and the expense of keeping appointments. Is likely to wait for outside help with respect to setting priorities and working in a structured. goal-directed way. Research drive Candidate 3.25 Benchmark min: 1.25, mean: 2.80 max: 4.00 Wants to deliver a creative piece of research, all parts of which are of excellent quality. Aims to make a significant contribution to the body of scientific knowledge. Finds the Ph.D. work extremely important and feels highly responsible for it. Is meticulous and likes to control all aspects of the Ph.D. work to make sure that an excellent result is obtained. Is eager tot find conclusive answers to research questions. Prefers unambiguous results and strives for excellence. Gives the Ph.D. work a very prominent place in life. Is intrinsically motivated for research. Networking and presentation Candidate 3.44 Benchmark min: 1.56, mean: 3.00 max: 4.00 Will not avoid discussing research matters with other people, but is not overly enthusiastic about this part of research work. Is slightly anxious when approaching experts in the field to discuss own research, as well as when networking. Can mostly cope with these feelings though. Despite some hesitation will attend meetings and conferences. Is able to make practical research arrangements involving strangers. Will not avoid giving presentations about own thesis. Independence and coping with criticism Candidate 2.62 Benchmark min: 1.50, mean: 2.85 max: 4.00 Most of the times finds a good way to cope with own perfectionism, if any. Tries to use criticism to improve own research, but is not always inclined to pro-actively seek out suggestions. Is not overly nervous when feeling evaluated. Can work independently and set own priorities, but needs outside help as well. May not easily discuss bothering aspects of the project easily with supervisors, but will do so in time. Will most of the time be able to overcome setbacks reasonably adequately. Cooperation and openness to feedback Candidate 3.30 Benchmark min: 1.40, mean: 2.77 max: 3.60 Will easily address colleagues for help. Is likely to be seen as a cooperative team worker. Actively looks for feedback from supervisors and will take this seriously in order to check being on the right track. Finds it normal to ask for social support when needed. May risk being diverted from main course by saying yes to requests that compete with the Ph.D. work.





Profile on the PPQ questionnaire for .

### Time management



Uses a reasonable time management, but is more short than long term focused. Uses deadlines, but may have a rather flexible attitude towards them. Tries to meet appointments, but attaches a lot of importance to following own interests too. Prefers structure, but leaves room for unplanned events. Tries to set the right priorities, but can be distracted or go with the flow too.

Research o	frive	
Candidate		3.62
Benchmark	min: 1.25, mean: 2	.80 max: 4.00

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### Networking and presentation



Will not avoid discussing research matters with other people, but is not overly enthusiastic about this part of research work. Is slightly anxious when approaching experts in the field to discuss own research, as well as when networking. Can mostly cope with these feelings though. Despite some hesitation will attend meetings and conferences. Is able to make practical research arrangements involving strangers. Will not avoid giving presentations about own thesis.

### Independence and coping with criticism



3.00 min: 1.50, mean: 2.85 max: 4.00

René Butter

psychologisch advies

Most of the times finds a good way to cope with own perfectionism, if any. Tries to use criticism to improve own research, but is not always inclined to pro-actively seek out suggestions. Is not overly nervous when feeling evaluated. Can work independently and set own priorities, but needs outside help as well. May not easily discuss bothering aspects of the project easily with supervisors, but will do so in time. Will most of the time be able to overcome setbacks reasonably adequately.

### Cooperation and openness to feedback



Feels exclusively responsible for thesis, and is not inclined to ask other people for social support. Want to solve own research problems without help from colleagues. Can work without comments or feedback for long periods. Is likely to refrain from showing "weaknesses" to others. Is not likely to be very team oriented . May decline contributing to goals that are not directly in line with own research goals.

### René Butter psychologisch advies



3.86 min: 1.43, mean: 2.80 max: 4.00

Uses long term time management with respect to the Ph.D. work. Determines priorities in the right way. Likes to set detailed deadlines and is committed to keeping these. Is not easily distracted from the main goals of the research project. Deals with appointments in a reliable way. Likes to focus on a subject and work in a highly systematic and structured way. Works in a selfpropelled manner independently of outside stimulation.

### **Research drive**

Benchmark



Is likely to work on a "good enough basis". Sees the research work as a means towards a goal rather than as a goal in itself. Can live with outcomes that do not lead to conclusive answers or with ambiguous results. Does not go for an outstanding or very creative Ph.D. thesis. Accepts open endings or loose ends in own work relatively easily. Accepts that failures are unavoidable. Sees the Ph.D. work as one of the concerns in life, but not as an extremely significant topic.

### Networking and presentation 3.33 Candidate 3.33 Benchmark min: 1.56, mean: 3.00 max: 4.00

Will not avoid discussing research matters with other people, but is not overly enthusiastic about this part of research work. Is slightly anxious when approaching experts in the field to discuss own research, as well as when networking. Can mostly cope with these feelings though. Despite some hesitation will attend meetings and conferences. Is able to make practical research arrangements involving strangers. Will not avoid giving presentations about own thesis.

### Independence and coping with criticism Candidate Benchmark Min: 1.50, mean: 2.85 max: 4.00

Easily recovers from receiving criticism on the research work. Considers it a learning experience rather than an attack. Has an open-minded, pro-active view to feedback on own research work, and sees this as an opportunity to improve the quality of the thesis. Welcomes evaluations as positive challenges and not as a threat. Is self-propelled in the research work. Can work independently from supervisors' comments and is able to set own priorities. Finds it easy to discuss bothering aspects of the project with supervisors. Is able to stay on course despite setbacks.

### Cooperation and openness to feedback Candidate 2.70 Benchmark min: 1.40, mean: 2.77 max: 3.60

Despite some hesitation will ask for opinions and help of others when necessary, but will also try to solve own problem. Finds a middle ground between working without feedback and actively asking for comply with requests as long as own Ph.D. schedule is not hampered. Finds a reasonable balance between team interest and own project.



### How to use the PPQ?

- The PPQ is not a stand-alone tool
- Substantial qualities must be taken into account by supervisors
- PPQ does not give an explicit judgement
- PPQ should be embedded in an interview session (coaching or selection) with the supervisor
- Structured interview protocol is available



## Target group for the PPQ

- Ph.D. candidates
- Research master students
- Post-docs
- Tenure trackers



### When to use the PPQ?

- Selection phase
- Just after selection (for personal development plan)
- When it is necessary to manage expections (e.g. "what do we mean by independence?")
- In training courses (for instance project management)
- Regularly, to monitor development



### PPQ is used at

- Utrecht University (REBO)
- Erasmus University Rotterdam (FSW)
- Maastricht University (NUTRIM)
- Leiden University (Science): in Tenure Track Program
- TU-Delft (EWI)
- University of Ghent
- AMC (pilot in a project management course next year)



# Testimonials by Ph.D. advisors

- "Leads to better thinking about the specific competencies needed"
- "Helps to make coaching plans"
- "Fine tunes personalized coaching"
- "Makes vague notions concrete"
- "Good practice:valuable to candidates and supervisors"
- "Completing the PPQ is pleasant; the questions really focus on what is on a Ph.D. candidate's mind"



### **Questions?**