



University support for building researcher competence

Interview with **Prof. Matias Pulópulos Tripiana**, Department of Experimental Clinical and Health Psychology, Ghent University

Conducted by:

prof. dr hab. Barbara Kożusznik, University of Silesia in Katowice **dr hab. inż. Olaf Flak**, Business trainer and consultant







The Interdisciplinary Centre for Staff Development





Prof. Matias Pulópulos Tripiana

Department of Experimental Clinical and Health Psychology, Ghent University



prof. dr hab. Barbara Kożusznik

University of Silesia in Katowice



dr hab. inż. Olaf Flak

Business trainer and consultant



C4RE talks

University support for building researcher competence

Interview with Prof. Matias Pulópulos Tripiana, Department of Experimental Clinical and Health Psychology w Ghent University

Conducted by:

prof. dr hab. Barbara Kożusznik, Uniwersytet Śląski w Katowicach dr hab. inż. Olaf Flak, Business trainer and consultant

- Barbara Kożusznik: Welcome to the Interdisciplinary Centre for Staff Development at the University of Silesia in Poland. We want you to listen to the interview with Prof. Matias Pulopulos on the topic of competency management at a university. The interview will be conducted by Prof. Olaf Flak and myself, Barbara Kożusznik.
- Olaf Flak: Our guest today is Prof. Matias Pulopulos, a neuroscientist working in the field of effective and cognitive neuroscience. He's currently a senior research fellow at the Department of Experimental Clinical and Health Psychology at Ghent University. His research aims to understand the effects of stress on health and cognition and the neurocognitive mechanisms of stress regulation and stress-related disorders in young and older people. He has been awarded several competitive national and international grants and projects. He has carried out research at Maastricht University and Harvard University. Prof. Matias, welcome to our interview. I would like to ask you some introductory questions. The first is: what are you currently involved in at the university? What kind of projects are you conducting now?
- Matias Pulopulos: Hello, everyone. Thank you for inviting me to this series of interviews. As for your question, I'm currently involved in different kinds of research for both young and older people. As for young people, I'm running a huge project here, in Belgium, in which we are investigating the development of stress resilience in families. We try to understand how the ability to cope with stressful situations can be shared between parents and children. As for older people, I'm coordinating the team that's part of a bigger project, in which we want to investigate what factors are related to the development of health problems in older people. Here, in Ghent, we are aiming at evaluating 20,000 people in the City of Ghent for the next 20 years, and the idea is to try to find what is the exposome, the external factors that might predict the development of psychological and physical health problems. This is a big collaboration

with the people from the Faculty of Medicine, the Faculty of Pharmacy; some of my team members and I are part of the team group focused on the psychological and cognitive predictors of resilience and health problems. These are the two biggest projects that I'm running right now. And I also have a few site projects focused on the neurocognitive mechanisms of stress regulation. That's in general what I can say.

- O. Flak: I understand. The second project is very long-term. 20 years you said.
- M. Pulopulos: Yes, 20 years, that's the idea. There are a lot of parties involved in the project like the City of Ghent, even the government from the Flemish communities, the biggest community in Belgium. The idea of this project is not only to try to understand what are the factors that help or contribute to the development of health problems but also to try to prevent and tackle those factors earlier before they develop. It's a huge project, yes.
- O. Flak: And what type of scientific projects do you think are the most important in your career? These ones you are conducting now or maybe some of the previous projects from the past?
- M. Pulopulos: Actually, the ones I'm conducting now, I think they are more important in my career because they will have—or we expect that they will have—a bigger and direct impact on society. Before, my research was more fundamental, it was more about understanding the neurological basis of stress regulation. For example which areas in the brain are related to stress, or what areas in the brain are affected by stress; those studies were more fundamental and was the basis for other people doing more clinical research. But the research I'm doing now will have a bigger impact on society, and I think that's more important, for me at least, for development as a researcher. I think that's probably the most important kind of study.
- B. Kożusznik: Thank you very much it sounds very impressive. We would like you to share with us some ideas on research work. My first question is, according to your opinion to your experience, what are the determinants of a researcher's scientific success?
- M. Pulopulos: That's a very nice very good question. I think that it's being able to do research that helps the field to move forward, and the research you are conducting should be oriented towards improving what we know. And, as a psychologist, in the end, it should have an impact on the society or the people. I wouldn't say that a successful researcher is the person who has more publications, I would not say that's the most important thing. For me, more important is the kind of research that they do, and that they are focused on the quality of their research, they are always focused on doing high-quality research that helps the field to move forward. I would say that's the most important thing.



- B. Kożusznik: Yes, but if we had to divide it into 100%, how much would you give to this or to the other crucial factor, and how much will it be for a researcher himself or herself, e.g. traits characteristics, or other factors.
- M. Pulopulos: I think that the personality and characteristics of a researcher are important. I think we all need to always aim at the highest quality possible and try to always focus on doing what can really matters for your field. I would say it's one of the most important things, to try to always focus on high quality.
- O. Flak: Matias, what do think about participating in research networks? What are the advantages of participating in a research network in your country, for example? What is its contribution?
- M. Pulopulos: I think it's a key factor even for a researcher's scientific success, connecting it with the previous question. Creating a network with your peers is critical for the development of your research. First, because you cannot know everything and you are not able to do all kinds of research, and you have to make these collaborations to try to find answers to new questions in your field, and to create new findings or evidence in your field. Especially here, in Belgium, they focus quite a lot and put a lot of pressure on establishing a network, not only on the national level but also on the international level. They evaluate, for the Belgium Government, it's guite important to create networks among researchers. One, it's important from the economic point of view if you have a good network of researchers in your country, they can share equipment, ideas, and that implies that you don't have to pay twice for the same work in two different universities when you can do it only once and the quality would be higher. On the other hand, if you have a good network at the international level, you can bring ideas and expertise from abroad to your country, and that increases the quality of your research, and at the economic level, it's good for the research community in your country because you can bring ideas and expertise that was developed outside. The network is a critical factor in the research.
- B. Kożusznik: Matias, what are your own experiences in strengthening your research competencies?
- M. Pulopulos: I would say I'm happy with how I could develop my competencies. I did so based on collaborations with other people. For example, I could do several research projects in different countries and at different universities, and I'm very happy I've done that because I could learn a lot from other people, I could learn new techniques, new expertise and—most important for me—different ways of working. It's not the same working in your lab always with the same people and going abroad and being able to collaborate with other people and learn how they do research. My experience is that these collaborations are probably one of the most important or easier ways to strengthen your research competencies.



- B. Kożusznik: But what about things like special courses, do you do you think they are useful or not as much as this personal experience?
- M. Pulopulos: Of course, that's also important. I have done several courses in statistics, language, I've learnt different kinds of techniques that you need for your research. You need to learn new techniques if you want to develop those techniques in your lab of course.
- O. Flak: Going deeper into the topic of competencies. What kind of competencies do you think matter when you think about leading virtual teams in research? Either you are a leader of such a mutual team, or you are a member. What are the competencies needed in leading such teams?
- M. Pulopulos: That's also a good question. Actually, now I have to work with people from five different universities in Belgium. And virtual research teams are quite a focus I have to work on. I would say that good communication, being able to communicate and transmit what you want from other people is a skill. Because it's not the same when you are working with people every day, you have contact with them, you can transmit everything and if there are any questions or doubts, you can always answer those questions. In virtual teams, sometimes it's more difficult to keep track of what everybody is doing. And to be sure that everybody is going in the same direction. I think the most important competence here is to be able to communicate what you want from other people and to try to have good communication with your peers. That's probably one of the most important factors. It's different from working in person because in person it's easier to do it. That's my experience I would say.
- B. Kożusznik: I would like to ask you about the team itself. According to your opinion, what happens in a team, and what are the conditions in a team to be met, so that it is successful in obtaining money? Because money is crucial for our projects.
- M. Pulopulos: From my experience, it's two factors I think are the most important. The first one is not being afraid of sharing what you want to do and what your ideas are. In our lab, we always try to share the projects that we have, not only within our lab, but with people from all outside the lab to get feedback and to improve the ideas that we want to do in a project. I think that is one of the most important things; sometimes, we write a project but we are in our bubble and getting feedback and ideas from other people is crucial to improve the project and taking to the next level. I would say that is one of the most important factors and we use it a lot. When we have a deadline for a project in March, we start to write the project 3-4 months in advance, we try to have a first draft of the project approximately 3-2 months before the deadline and then we share it with quite a lot of people that...



- B. Kożusznik: Matias, but some researchers think that it is risky, it is too open.
- M. Pulopulos: Yes, but in our experience, you can get more than you can lose. And the second factor is again the collaboration with all the research groups, to not try to do everything in a project by yourself but to try and to involve other people from other labs, universities even from other countries to attract the expertise you don't have in your lab to improve your project. What we do is we ask for feedback from other people and if we think not only the feedback but the expertise of a person is important for our project, we try to invite this person to participate in it. Just having their experience, their expertise is important for us. I can say that in our lab, I'm happy that we are in general quite successful with getting projects. One of the last projects we got is a project from the Belgian government we got €4 million for a 4-year project. And the PI of this researcher, he started a big collaboration with people from all around Belgium and even with people from other countries.
- B. Kożusznik: So sharing, having feedback, and collaboration.
- M. Pulopulos: I know that some people are afraid of sharing their ideas because others are going to steal them. In our case, I have the impression that we win more than we lose by sharing. Of course, you have to trust the other person. You're not going to send it to somebody that you don't know at all but.
- B. Kożusznik: You have to have minimal protection.
- **M. Pulopulos:** But anyway here in Belgium, when you submit your project to the government, they will send your project abroad to 3-4 people to evaluate your project. So anyway would be read by others.
- O. Flak: You said, it's worth sharing ideas before you start doing them. That's why I would like to ask you a little bit about creativity. It is said creativity is quite important or rather essential in science, generally speaking. What do you think about creative teams? What features can you find, which can distinguish creative teams?
- M. Pulopulos I would say that the creative team is a team able to develop new ways to answer questions; that is not focused only on the techniques or methods that we currently have to answer questions but it develops new ideas and ways to answer those questions. For example, a few times, we have had some studies we tried new ideas, we wanted to test what was the effect of stress on one specific cognitive task but we were not sure if the task we were using was correct. Because we could only discover it after this study. We decided to do the study anyway, and —in the end—it didn't work out, it was a disaster. We couldn't even get any clear results from this study but we learned a lot, and we could improve this method. Throughout the last few years, we could develop a nice new method to assess attention bias in participants



by creating a new technique. And that was thanks to the fact that a few years ago, we decided to not be afraid of failing in creating these new methods. I think that the most important feature or characteristic of a creative team is trying to develop new ways to solve your research questions.

- B. Kożusznik: Let me continue this thought because creativity is one factor. I think that it's a substantial one in research teams but creativity not always leads to effectiveness. What are other factors, which contribute to the effectiveness of a team and researchers?
- **M. Pulopulos:** First, we should define what the effectiveness is for us.
- B. Kożusznik: Of course, there are different dimensions, maybe one of them is creativity. But what other factors do you see due to your experience?
- M. Pulopulos: For me, a good indicator of team effectiveness is the ability of a team to do research that helps a field to answer research questions we have at this moment.
- B. Kożusznik: May I interrupt you a little bit? When I was observing your researcher profile, you are cited a lot, you have thousands of citations. And I've noticed that you avoid these publications, indexes, and all of this. Don't you think that they are indicators of the effectiveness of the team as well? I know it's difficult.
- M. Pulopulos: It's a tricky question because one thing... I think that now, there is a change in the mentality of researchers. Until a few years ago, the number of publications had been the indicator of effectiveness but I don't agree with that. I think I'm not the only one, there are a lot of people who think the same. Publications are not an indicator of effectiveness, but the number of publications is just the result of being a good researcher but is not the only factor that determines or indicates how effective or how good of a researcher you are. For me, it's more important to focus on the high quality of what you are doing. If you are doing high-quality research, in the end, it's going to be published; it could be published in a better or worse journal, but that doesn't depend only on you. Publication depends on so several other factors, e.g. being lucky because you have nice reviewers. Being lucky because the editor is in a good mood when reading your publication. But that's something that's out of your control. Not everything but what would you have to do or what's in your hand is the process before the publication, before sending your manuscript to a journal. I think that if what you do, in your research affects how other people or teams do their research, they try to follow the kind of research that you are doing; that is a good indicator of effectiveness or good research. In my case, I have different kinds of studies, I have some studies that were not cited at all, and some others that in only 3 years got more than 100 citations. I think that it's because the studies that are more often cited have



more influence on the field, other people and researchers and I would say that's more important than the number of publications per se. But still, the citation from other people would also depend on the number of the type of results that you're showing; it's a tricky point because I don't think that we can just focus on numbers, we should focus on more on the qualitative part, try to focus on how good to the research is. In this sense, trying to make high-quality research is the key factor.

- B. Kożusznik: Thank you very much for this opinion because we share it with you.
- M. Pulopulos: I'm happy to know that because I see that in the scientific community, it's these two themes; one will focus only on the number of publications and the other one on their quality And we would like to move research towards quality and not only quantity. In fact, at our university, they are moving towards this direction. They want us to focus more on quality not on quantity.
- O. Flak: I would like to go back to the competencies, which are also connected and create the background of our work. When you look at your teams, in which you are working now, what competencies would be developed or increased in the teams to increase the effectiveness of work?
- M. Pulopulos: I think that one of the problems we have in our team is that the number of projects we already have at this moment is too high. Sometimes we cannot handle all of them. Sometimes, it's difficult to give the right amount of time to all of them. I think that sometimes, we try to do more than we should. I cannot say what kind of competencies these are but I would say that sometimes we need to focus more on fewer projects to have more time for each of them and try to take each to the next level. So we should learn how to reduce the number of them.
- B. Kożusznik: I will follow this with a question. What if it is not individual competence maybe it's universal competence? How do you think?
- M. Pulopulos: That's a good point because you always have the pressure of doing more, more and more; it's not always possible. You always try to get every chance you have to start a new project but then you don't have the time to do them all.
- B. Kożusznik: Usually, a university thinks that because, generally, the number of grants, projects and finances is good for the university; but in the long run, it may result in failure because some people cannot take this burden of so many tasks and projects.
- M. Pulopulos: Exactly, in the end, you have only 24 hours per day so you don't have time to work on all your projects as much as you want. Sometimes, you need more time to really develop one project; if you don't have the time to do it, then...
- B. Kożusznik: I think that this is a problem of all universities, or maybe in some of the



biggest ones this problem is somehow solved better, or people are much stronger, like zombies.

- M. Pulopulos: Anyway, even if you are a zombie and your life is only about doing research, you don't have time to do everything. I would prefer to have fewer projects but with more time on each project for better quality.
- B. Kożusznik: Very insightful remarks. But sometimes you can dream about it.
- **M. Pulopulos:** Yeah, I think we go back to the same point again. It's not quantity it's quality. And to do high-quality research, you cannot have 20 or 15 projects running at the same time.
- B. Kożusznik: But don't you think... I'm coming back to our first questions about some features and characteristics of a researcher. I think that to do research according to your opinion requires from a researcher some courage, assertiveness, this kind of character, so a young researcher knows when to say "No, I don't take the next project because it's too much."
- M. Pulopulos: That's true, it's something that sometimes we lack. We need to say "No, that's more than I can handle, and I would prefer not to continue with this because I prefer to focus more on the quality of what I have." But it's always the same because in research, you start working on a project now and the results, output, or the reward—let's call it this way—will come years later. You know that you have to start moving the ball now because you're going to get the results in a few years. And if you're running a project now in which you are very motivated because you know it's an important project but you also think "Okay, I have to stop now moving the ball for the next one" because otherwise, once this finished, you won't have anything else to do and I would be useless.
- O. Flak: I would like to continue this topic because I also agree that it's better to do less but better than more and not so good. When you try to form a team for a project, do you look for people outside the university, too? For example, specialists from companies or institutions, which could help you. Does it work like that?
- M. Pulopulos: Yes, in our team, our research is quite a health-oriented one. We always try to go to medical doctors or psychologists working in clinical psychology to know their opinion. We try to understand what their opinion about the topic is because that's crucial for us to try to develop new ideas and develop new research. We think that you always need one of your hands in the real work, otherwise, you might lose the connection with what you are doing; if it's not connected with the real world you might lose the final aim of your research. We always try to get the opinion from them and sometimes, not myself because I don't do this kind of research but some



colleagues from our research team trying to develop new treatments for patients with depression do. And so they invite patients with depression who suffer currently or suffered from depression in the past to have their opinion about the treatment they are developing. They receive great feedback. You might think they know nothing about the neurocognitive mechanisms of depression but they know what they feel and experience, and their opinion on this issue is very important.

- B. Kożusznik: Now, maybe something more positive. What is your experience as far as the method of strengthening the level of research by your university? Do you have some examples of what your university does to strengthen research conducted by individual researchers?
- **M. Pulopulos:** In this sense, I think Ghent University is a good example; in 2018, they decided to change the focus of the researchers' evaluation. Now, we don't focus too much on the number of publications, we focus on the quality of the research. For example, before 2020, PhD students were obliged to publish at least one publication before they could finish their PhD. Now, they don't need any paper to submit their PhD for evaluation. That's one thing. Of course, it's not about them doing anything they want and not focusing on publications. What the University decided is to focus on open science. When I say open science, I don't mean publishing in open journals like Frontiers, or journals you have to pay a lot to publish in, but the process before a publication. We are encouraged to preregister our studies, for example; before we start a new experiment or a new study, we have to write our clear hypothesis, objective, and specify that—for example—we are going to do this, run specific statistical analysis, use this kind of indexes, and at the end, we are going to test this hypothesis doing specifically this. Also, we have to publish it for example within the open science framework, or platforms like clinicaltrials. com, or there is a platform of the European Union. So what our University does is they ask us to focus more on open science in this part of the process and less on the number of publications. I think it's a good move by our University because that reduces the stress of the people and increases their focus on good work. I think it's an important move by our university – to focus more on the process of open science. For example, all PhD students have to put all their data analytic plan and everything in a place anyone can access and can check what they have done and check the quality of their work. I think our University is now focusing more on the process and not only on the output and result.
- B. Kożusznik: My last question. What conditions what conditions according to you can create an innovative university? You can use whatever positive words you'd like to describe creative, innovative universities that Matias loves.



M. Pulopulos: I have to say that I'm very happy with Ghent University. First of all, a few years ago, they decided to improve the health of their workers. I know it's not only focused on research but in general, they decided to focus a lot on the health of their workers. They decided to improve the well-being of their researchers, teachers, and administrative personnel. They started with this, and based on this, they decided to change the way they evaluate our research towards quality and not quantity, as I mentioned before. So they decided that everybody at this University is important, they know they cannot evaluate the same competencies in everyone because we are different people; so they consider what you, as a person, can bring to our university. what your competencies are; and they are going to evaluate you based on your ability to improve yourself and to grow in our institution. This is affecting a lot the way we are working because I think people feel less pressure to do meaningless things, and to focus more on what is important for our work, to do good research or to deliver a good class for our students, and to improve the quality of our work. I think it goes hand in hand that if you want to improve and be a more innovative university, you need to focus on that you have to really evaluate this in your people, to be innovative, but at the same time support them that you are going to evaluate the process and not only the result.



• M. Pulopulos: Thank you for inviting me, and I hope my answers were clear enough and that could help a bit on this nice project that you have.







The Interdisciplinary Centre for Staff Development

Our mission is to provide solutions to make workplaces people-friendly and to foster organisational development.

ICSD acts as a partner for the science and higher education sector by conducting research in the field of improving human resource management processes.

The series "C4RE talks" (Compences for Research Excellence) consists of presentations, conversations and meetings with excellent experts from around the world who specialize in building and developing competences. The cycle is carried out as part of the activities of the Interdisciplinary Center for Personnel Development.

C4RE TALKS

MORE ABOUT ICSD

CONTACT

ul. Bankowa 14, room 433 40-007 Katowice phone: +48 32 359 24 66

e-mail: icrk@us.edu.pl