

## ***“Emotion has always been a personal topic for me”***

### **An interview with EARLI SIG 8 Motivation and Emotion 2024 Lifetime**

#### **Award Recipient Reinhard Pekrun**

From Juliane Schlesier and Jonne Bloem

What do emotions have to do with learning, achievement, and educational systems? Quite a lot, according to Reinhard Pekrun, one of the most influential scholars in the field of Educational Psychology. As the recipient of the 2024 Lifetime Achievement Award of the EARLI SIG 8, Pekrun reflects on his groundbreaking contributions to the understanding of academic emotions, his development of the Control-Value Theory, and the personal experiences that inspired his research. In this interview, he speaks about key milestones, current challenges in education and science, and his hopes for the future of emotion research – offering not only deep insights but also clear advice for early-career researchers.

#### **About Reinhard Pekrun**



Reinhard Pekrun is currently Professor of Psychology at the University of Essex and a Professorial Fellow at the Australian Catholic University in Sydney. For many years, he served as Professor of Psychology and Vice President for Research at the University of Munich in Germany (LMU). He is internationally renowned for his work on academic emotions and motivation, and as the originator of the Control-Value Theory of Achievement Emotions. With over 400 publications, Pekrun ranks among the most highly cited researchers in the psychological, educational, and social sciences. His numerous honors include the Sylvia Scribner Award of the AERA, the EARLI Oeuvre Award, and most recently, the 2024 Lifetime Achievement Award of EARLI SIG 8 Motivation and Emotion, which is also the occasion for this interview.

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#### **Personal Career**

***What inspired you to pursue a career in the field of motivation, emotion, and educational research?***

Well, after your award speech at Bern, we could almost stop here! (*laughs*) But seriously, this is actually one of the easier questions. I am a very emotional person — I experience emotions quite intensely, both positive and negative. So, emotion has always been a personal topic for me. At the same time, I have

always been strongly achievement-motivated, which is partly shaped by my family background. But because of that, I struggled, as many students do, with test anxiety as a student – I remember having real panic before exams. Coincidentally, in the 1970s, test anxiety was a major topic in psychology, so I took a seminar where we developed a test anxiety questionnaire, and I was immediately fascinated. That's how it started: I have been constructing emotion and anxiety questionnaires and studying the effects of emotions ever since. It was a mix of personal experience and academic curiosity. What also drew me in was how interdisciplinary the topic was; test anxiety research combined perspectives from personality, emotion, and educational psychology, and even touched on neuroscience. That broad scope really appealed to me. Later on, I also became involved in the *Society for Test Anxiety Research* and served as editor of the journal *Anxiety, Stress, & Coping*. So yes, I truly started out as a test anxiety researcher.

***Which milestones or achievements do you consider the most significant – and why?***

Before I answer, let me add one thing: I have always focused on education, not because emotions do not matter in other domains (they certainly do) but because I believe education is foundational to everything else in society. Unfortunately, it is often undervalued, especially in our Western countries, and this is something I find quite troubling. As for milestones: First of all, I would like to emphasize that most of what I have done was teamwork – with doctoral students, postdocs, and colleagues. If I had to highlight key areas, there would be two: empirical research and theory development. In the 1990s, we aimed to broaden the scope of emotion research in education. Until then, test anxiety research had dominated the field, and emotions like pride, shame, or enjoyment were rarely studied in their own right, except for Bernard Weiner's attributional studies. We worked to change that by developing empirical tools that captured a fuller range of achievement emotions. On the theoretical side, I developed a series of models, starting with early expectancy-value approaches. The most widely recognized one is the control-value theory of achievement emotions, which addresses how students' perceptions of control and value shape their emotional experiences. That theory and the related empirical work have been milestones for me – particularly two publications: the 2002 article on academic emotions in *Educational Psychologist* and the 2006 article on control-value theory in *Educational Psychology Review*. Another contribution is the development of the Achievement Emotions Questionnaire (AEQ), which has been widely used in research. And although it is less visible, I also contributed to the framework designs for student engagement in international student assessments like PISA, especially in the early 2000s.

***You already mentioned some personal challenges before – what would you say were challenges in your career, and what helped you overcome these?***

There were definitely challenges. In the 1980s, many early-career researchers in Germany faced the prospect of unemployment. Universities had expanded rapidly in the previous decades, but positions at the senior level were filled, and hardly anyone was retiring as yet. So, opportunities were scarce. I had to stay flexible and open to alternative paths – and that mindset helped. Another long-standing challenge

has been the limited impact of research on educational policy. The first PISA results in 2000 demonstrated that German students' performance was not world-leading, but that the country scored very high on socio-economic disparities in student performance and educational opportunities. These findings shocked policymakers and the public, and there was a brief window of openness to reform in Germany. But that momentum faded, and it is still very hard in the country to influence educational policy in a meaningful way. What helped me was a shift in perspective: Instead of waiting for systems to change, I focused on going international, building collaborations, and finding platforms where research could make a difference. Sometimes you just have to take the initiative even if the structures are not ready yet.

## **Research in the Field of Emotion**

*What is the core idea behind the Control-Value Theory, and how would you assess its relevance in the field of educational psychology?*

The basic idea is not entirely new – it is rooted in social-cognitive theories from the 1950s around the core idea that our motivation, emotions, and behavior are not shaped by objective situations themselves, but by how we perceive and interpret them. What is specific to the control-value theory is the focus on two key appraisals: control and value. These two dimensions seem to underlie most human emotions. Considering these two appraisals also makes it possible to connect emotion and motivation theory: Expectancies and values are fundamental to explaining motivation, according to expectancy-value theories. They are also foundational to understanding prospective, future-oriented emotions like hope and anxiety, according to control-value theory. However, there is an important difference between motivation and emotions that is highlighted in control-value theory: Motivation tends to be future-oriented; emotions can not only relate to the future, but also to the past or the present. Another core idea in control-value theory is the integration of dynamic systems thinking. For example, emotions influence achievement, but achievement also shapes emotions – these are reciprocal effects that unfold over time.

*Were there any surprising findings that emerged from applying the theory?*

Yes, several. One was how strongly valence – whether emotions are positive (pleasant) or negative (unpleasant) – predicts academic outcomes. Experimental research shows that certain negative emotions like anxiety can be helpful in specific tasks. However, large-scale studies show positive emotions generally tend to support achievement, while negative emotions – including anxiety – tend to undermine it. Another surprise was the lack of evidence for the commonly cited idea that a “moderate” level of anxiety boosts performance, based on the Yerkes-Dodson “law” of arousal and performance dating back to 1908. Our data consistently show a monotonic negative relationship between anxiety and achievement. Also unexpected was the high subject-specificity of emotions. Students' emotional responses differ drastically across subjects like math and languages. There seems to be no general

emotional “trait” that applies across domains – emotions are shaped by the context much more than previously assumed.

***Has your perspective on the field changed over time?***

Definitely. One concern is that much of our current theory stems from the 1950s to 1980s. That may reflect the robustness of those models — or it may indicate a lack of paradigm change. Personally, I believe we need progress in five areas. First, formalizing theories: Many psychological theories are still too vague to be tested rigorously. In other fields, like cognitive science or economics, models are mathematically specified; we should move in that direction. Second, focusing more on within-person processes, rather than relying mostly on between-person analysis. Third, integrating digital learning environments into our understanding of motivation and emotion. Fourth, connecting with neuroscience, which remains underutilized in educational psychology. Fifth, expanding cross-cultural perspectives. Most research in our field is still one-sided and imbalanced, focusing on WEIRD countries — Western, Educated, Industrialized, Rich, and Democratic. We need to understand how emotions and motivation play out in underrepresented regions around the world.

**Involvement in EARLI and Lifetime Achievement Award of the SIG 8**

***How did you start your involvement with EARLI and, in particular, with the SIG 8?***

My connection with EARLI actually began back in 1989, when I joined the predecessor of SIG 8, the Workshop on Achievement and Task Motivation (WATM). That was my entry point, and from there, I became increasingly involved. Out of curiosity, I looked through my CV and found that I have contributed to a total of 76 EARLI events, including 56 keynotes and paper presentations, 10 symposia, and participation in various ICM and EARLI committees. I also published various articles on emotion and motivation in our EARLI journal *Learning and Instruction*, including two special issues. While I was never part of the official governing boards, I do feel that I have been able to contribute to the SIG’s development over the years.

***What did the reception of the SIG 8 Lifetime Achievement Award mean to you on a personal level, after so many years of work?***

I truly felt honored. This award is particularly meaningful to me because it comes from my immediate scientific community. Knowing that so many colleagues supported the nomination was genuinely touching. It gave me a deep sense of connection and appreciation. This is what makes this award so special to me. But let me also say: The award is based on teamwork and attests to all the support I received from students and colleagues over the years. I am extremely grateful for this support.

***As you consider this your academic home, are there any directions you would like to see it take in the coming years to support researchers and practitioners?***

First of all, I think you are doing an outstanding job as the coordinators of our SIG – so my main advice is: keep going as you are. The structure of the ICM conferences, the SIG 8 symposia at EARLI, and the support for early-career researchers, especially through summer schools, have evolved beautifully. Please do not change that! At the same time, I do see a few directions that could further strengthen the work of SIG 8. One idea I found particularly valuable was the joint conference held with SIG 16, Metacognition and Self-Regulated Learning, in 2022. Collaborating across groups with overlapping research interests broadens perspectives and fosters interdisciplinary exchange. Repeating that format with the same or other SIGs in the future could be a fruitful path. Another thought is to occasionally bring in voices from neighboring fields, such as learning analytics, affective computing, or neuroscience. These disciplines are increasingly relevant to our core topics, yet their researchers do not always attend ICM or EARLI events. Creating space for selected contributions from these areas could provide new insights and stimulate cross-disciplinary dialogue. Finally, I believe we face an ongoing challenge in our field that is shared across much of educational research. There is a lack of clarity and consistency in defining core constructs. This makes measurement difficult and slows scientific progress. Other disciplines have addressed similar issues through consensus-building efforts like task forces, shared terminology initiatives, or consensus conferences – SIG 8 could take steps in that direction as well. It would be an ambitious undertaking, and certainly not an easy one, but potentially very impactful. I would be happy to contribute to such an initiative.

## **Future Activities and Advice**

### ***What do you consider the most important future directions for research on emotions in education?***

Some of the key challenges I already mentioned tie directly into the future of our field. One central direction is the need to formalize emotion theory. Compared to other disciplines, we still lack theoretical models that are precise enough to be rigorously tested. Another important area is to broaden the scope of emotions we investigate. So far, research has focused heavily on achievement emotions and, to a growing extent, epistemic emotions. But we also need to look more closely at social emotions in the classroom and how they shape relationships, motivation, and learning, both for students and teachers. Furthermore, I believe we must explore the temporal dynamics of emotions more deeply. How do emotions change from moment to moment, over days, weeks, and across the lifespan? We need to understand how these different time scales interact. Closely related is the question of universality. Many foundational theories assume that core mechanisms of motivation and emotion are universal. But is that really the case? What happens when individuals do not align with the assumptions of needs-based or expectancy-value theories? Are there people who benefit from failure expectations or even from need frustration? These are difficult, but important questions. We also need more research on intervention, especially how to redesign learning environments in ways that support adaptive emotions and reduce negative ones. Social-emotional learning programs exist, but targeted, theory-driven studies on how to

comprehensively change teaching, classrooms, and schools, beyond isolated interventions, are still rare. Further, we face persistent challenges in replicability and generalizability. This calls for more multi-lab collaborations and larger-scale cross-cultural longitudinal studies that go beyond existing efforts like PISA. Finally, I would love to see historical perspectives integrated into our field. Historians might offer valuable insights into how emotions in education have changed over the centuries, providing food for thought about future development.

***If you could design your own future research project, what would it look like?***

Two directions are especially important to me. I would like to investigate the dynamics of emotions across time scales, ideally in cross-cultural samples. Moreover, I would focus on intervention, continuing our efforts to develop and test emotion-based instructional designs grounded in control-value theory. We have already begun this work in the context of a European project funded by Horizon 2020 (ECoWeB – Assessing and Enhancing Emotional Competence for Well-Being in the Young), and I hope to build on that.

***Are you still actively pursuing new goals in your research, or are you ready to relax on a beach somewhere?***

*(laughs)* Definitely not the beach just yet. I am currently working on formalizing control-value theory, deepening the dynamic aspect of emotion models, re-examining questions of universality, and developing emotion intervention. I also contribute to other motivation and emotion projects, teach, supervise PhD students, work as an administrator, and serve the community. This keeps me engaged.

***What advice would you give to young researchers starting their careers?***

I have six suggestions, most of them shaped by things I have learned the hard way. First, keep a broad curiosity, but develop a focused research program. Many early-career researchers spread themselves too thin across unrelated topics, as I did when I started. That makes it hard to build expertise and visibility. Second, do not underestimate your work. Submit to top journals even if you doubt your paper is strong enough. You may get rejections either way, but aiming high increases your chances of making a real impact. Third, start presenting at conferences early, even as an early PhD student. Engage with the community and join events like the ICM or summer schools. They are invaluable for both learning and connecting. Fourth, use the available communication tools. Build your online presence, such as a Google Scholar profile, online academic networks, and social media if they suit you. Using online tools is a way to make your work more visible; many do not take advantage of it. Fifth, focus on networking, both horizontally and vertically. Collaborate with peers who share your interests and contact the leaders in your field – junior researchers should not be afraid to approach more senior researchers. I was shy myself early on, but I have found that most colleagues are open and encouraging if you just reach out. And sixth, perhaps most important: persistence. Rejections, whether from journals or funding agencies, are

part of the job. Even highly cited researchers face them all the time. It is essential not to take them personally. However, especially regarding funding, I believe we also need a shift in thinking. Many universities still evaluate researchers primarily on grant success, but with success rates often below 10%, funding is becoming a lottery. It is not just about effort or merit, given the shift from university-based funding to competitive external funding, combined with the restrictions on research budgets in many of our countries today. We need to make that clear, not only to early-career researchers but also to our institutions, and convince policymakers to shift gears and recognize the importance of research for our global future.

Note: The interview was prepared by Juliane Schlesier and conducted by Juliane Schlesier and Jonne Bloem. DeepL Write and ChatGPT were used to check the text for language accuracy.