They may study an unconventional group, but they have fun doing so. Lynn van Vugt and Mark Levels focus on NEETs: young people who are Not in Education, Employment or Training, and are difficult to engage. Van Vugt's PhD research—supervised by Levels, professor of Health, Education and Work—produced eye-opening findings that point to the need for policy changes.

Her PhD was part of a broad-based international consortium study on NEETs led by Levels. Focusing on young people aged 15 to 29, Van Vugt examined the role of institutions from an international perspective. Across countries, low literacy (lacking the reading and writing skills to participate in today's information society) turned out to be the strongest predictor of becoming NEET. Active labour-market policies, such as job-application training, were of little help. "These policies only work for people who are literate. Policymakers, including here in Limburg, tend to focus on this easier-to-reach group, as there are often subsidies involved."

At the national level, Van Vugt examined the role of the family in becoming NEET. Her findings showed that parental resources (income, education and skills) have a protective and preventive effect. However, 'shocks' such as divorce or a sharp drop in household income can lead to school dropout—a strong predictor of becoming NEET.

These are eye-opening findings, says Levels. "Lynn has convincingly shown that children are often not to blame for dropping out of school. It's their socioeconomic background that makes them vulnerable. Their disengagement usually stems from a lack of ability rather than a lack of willingness. If you look at it that way, it's clear that policy changes are needed."

Relevant research

When the research position became available, Levels immediately approached Van Vugt. "As a young researcher, Lynn had already proven herself. She'd previously developed the school reports for the Netherlands Cohort Study on Education, so I knew she had the skills to organise this highly complex project." For Van Vugt, what mattered was that the study was of both academic and societal relevance. "It wouldn't end up in a drawer somewhere. Policymakers can actually use our findings."

The pair enjoyed working together. They formed a genuine team, says Van Vugt, together with her second supervisor, emeritus professor Rolf van der Velden. "What I've always appreciated about Lynn is her ability to use reason and persuasion," Levels says. "These are important skills that require courage. She taught me that amid all the chaos, it's possible to respectfully request priority for something you urgently need." In turn, Van Vugt learnt a lot from her supervisor—not least the importance of a good work—life balance. Levels: "She kept on working through her pregnancy until I told her, 'Now it's time to stop.""

Personalised approach

There is no one-size-fits-all solution to prevent young people from becoming NEET. "Tax incentives, home visits from school inspectors—they don't solve the underlying problem," Levels says. "Current policies fail because they target the common denominator, the easy cases." Childcare may be an exception, Van Vugt suggests: "If you make childcare cheaper—or better yet, free—young mothers are more likely to use it, and thus return to work or school."

But in most cases, Van Vugt recommends a personalised approach. "There's always more going on than just low literacy. Every case is complex." As for prevention, she envisions a larger role for schools, which should enter into dialogue with vulnerable students facing multiple, complex problems. "Paid internships for younger people could also help. Combining working and learning would allow them to build up a professional network and gain relevant skills."

Youth coaches

The first challenge in addressing NEETs is reaching them. They are rarely registered in the education system or included in unemployment statistics. They also tend to be distrustful and reluctant to accept help. Youth coaches could play a role here, the sociologists agree. Van Vugt: "For each case, we have to identify the obstacles and consider how to circumvent or remove them. What motivates these young people? Should we help them go back to school, get an internship or find a suitable job? You can also involve parents and help them acquire new skills."

Social resilience

Van Vugt, now project leader of the Netherlands Cohort Study on Education, is working on several publications. She is also looking forward to the challenge of conducting a new study focused on persistent NEETs. "We have new data coming in for the NEET study, including data on non-cognitive skills like social resilience. Lack of motivation is not usually the core problem. Making vulnerable young people more resilient may prevent them from becoming NEET in the first place." As for Levels: given the increase in psychosocial issues caused by the covid pandemic, he expects NEETs to remain a major social problem for the foreseeable future. <



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Lynn van Vugt obtained her PhD from the Research Centre for **Education and the Labour** Market (ROA) at the **Maastricht University** School of Business and Economics. Her research focuses on NEETs, young people who are Not in Education, Employment or Training. She currently works as a project leader at ROA and is involved with the Netherlands **Cohort Study on Education** and the Education Monitor Limburg.

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Mark Levels is professor of Health, Education and Work and programme director at ROA. He is also dean of lifelong development at Maastricht University and one of the founders of the Netherlands Cohort Study on Education. His research focuses on how legislation and government policy influence human behaviour and decision making.

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To make investments like that, startups have to secure substantial funding; even established pharmaceutical companies have to weigh up the pros and cons. With our facilities, we aim to become a collaborative partner offering services to others in the field. We want to accelerate this new medical paradigm, foster ideas and innovations, and facilitate the transition from lab to patient for large and small parties alike. From reliance on subsidies to commercial viability."

Automation

Sinha proudly shows off the various cleanrooms, featuring equipment from suppliers from the Netherlands and abroad. This is where human cells and other materials are processed and stored. The heart of ReGEN Biomedical is the cleanroom where the actual production takes place, carried out by an automated system. It was configured by Sinha and his international team, including software they developed themselves. Entirely automatically, the system places cells into thousands of tiny compartments, feeds them, and combines them to grow into small tissue slices. "These slices will initially be used for personalised drug screening—and, one day, to heal patients."

Moonshot

Enthusiasm aside, Mastenbroek is keen to play down the high expectations. "We're at the very beginning of this process. Compare it to the 1960s, when we wanted to go to the moon. It seemed impossible, but we did it. Regenerative medicine is a moonshot. We know it's possible, but there are still many obstacles to overcome. Every step is progress. Together with the other facilities—biomaterials in Eindhoven, stem cell production in Leiden and personalised cell therapy in Utrecht-we're aiming for the moon." ≺

ReGEN Biomedical was founded by professors Marianne van der Steen and Clemens van Blitterswijk.

Marianne van der Steen: "Collaboration between regions, universities and private parties on this scale is truly unique. Thanks to funding from the National Growth Fund and REACT-EU, ReGEN Biomedical is giving the Netherlands a genuine opportunity to compete with major hotspots like Boston, California, and Japan."

Clemens van Blitterswijk: "Over the past eight years, the MERLN research arm has created over 150 jobs and been involved in many prestigious projects and publications. We're now turning our focus to achieving the same level of success in commercial applications. ReGEN Biomedical represents a significant step that will form the backbone of a robust commercial regenerative-medicine ecosystem in Limburg."

cell biology in Wageningen and obtained his PhD from Maastricht University, where he is currently completing his MBA. He previously worked at UM and RegMed XB. In 2021 he was appointed operations manager at ReGEN Biomedical. He is also a board member of the Limburg Foundation for Nature and the Environment.

Tom Mastenbroek studied Ravi Sinha moved to the Netherlands in 2011 after studying in India and the US. He obtained his PhD in Biomechanical Engineering from the University of Twente. He has held postdoc positions at Maastricht University and KU Leuven. He joined ReGEN Biomedical in 2021.

