LEIDEN UNIVERSITY GREEN OFFICE

IDENTIFYING THE GAP BETWEEN RESEARCH AND POLICY ON THE SUSTAINABLE DEVELOPMENT GOALS AT LEIDEN UNIVERSITY

RESULTS OF A SURVEY CONDUCTED BY THE LEIDEN UNIVERSITY GREEN OFFICE IN NOVEMBER 2021

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The following report discusses a survey on the topic of the Sustainable Development Goals that was distributed among researchers at Leiden University in the month of November 2021. The results of this research are indicative of researchers' opinions and mindsets at that moment in time.

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Leiden University Green Office (LUGO): LUGO is the student-run sustainability office of Leiden University. It aims to integrate issues of sustainability into university policy, education, research, and facilities, as well as critical assessments.

See www.universiteitleiden.nl/en/green-office for additional information.



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LIST OF ABBREVIATIONS

CML: Institute of Environmental Sciences

LUGO: Leiden University Green Office

LUMC: Leiden University Medical Centre **SDGs:** Sustainable Development Goals

UN: United Nations

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1.INTRODUCTION

In 2015, the United Nations (UN) put forward 17 global goals aimed at working towards a more equal and sustainable planet - the Sustainable Development Goals (SDGs) (UN Department of Economic and Social Affairs, n.d.). These goals were formulated with the collective objective of bringing prosperity and peace to the world, stopping poverty and hunger, and taking proper care of the Earth. They are interlinked - a shift in any one SGD will affect (some of) the others. Therefore, action taken to tackle any goal should be in balance with the rest, effectively addressing economic, social, and environmental sustainability at the same time. The 17 SDGs, as listed by the UN Development Programme, are as follows (UNDP, n.d.).

- 1.No Poverty.
- 2.Zero Hunger.
- 3.Good Health and Well-Being.
- 4. Quality Education.
- 5.Gender Equality.
- 6.Clean Water and Sanitation.
- 7. Affordable and Clean Energy
- 8. Decent Work and Economic Growth
- 9. Industry, Innovation, and Infrastructure
- 10. Reduced Inequalities

- 11. Sustainable Cities and Communities
- 12. Responsible Consumption and Production.
- 13. Climate Action.
- 14 Life below Water
- 15. Life on Land.
- 16. Peace, Justice, and Strong Institutions.
- 17. Partnerships for the goals.

























Figure 1. The Sustainable Development Goals (UNDP, n.d.).

Leiden University underlines the importance of the SDGs within their vision on sustainability for 2030 (see: 'the sustainable university' dossier on the university website). It is through its research and teaching that Leiden University claims to help make the world a better place, making use of step-by-step plans to valorise work for impact (Leiden University, n.d.-b, n.d.-c). On sustainability in research, the university states: "Our mission is to use our research to gain more insight into global sustainability issues and to develop knowledge for correct and proportional solutions. We therefore contribute to the UN's Sustainable Development Goals." (Leiden University, n.d.-e).

In November 2021, Leiden University's Green Office (LUGO) was interested to learn if researchers at Leiden University were generally familiar with the SDGs and if they considered the SDGs in and during their research. LUGO was keen to capture the perspective of researchers because these ultimately produce the university's research output. Exploring how researchers relate – or do not relate – to the SDGs could provide insight into Leiden University's research context, and what terms those working in this context are familiar with. Moreover, LUGO anticipated that this would provide an understanding of how the university could encourage researchers to consider the SDGs in and during their research. As a first step in this direction, LUGO set up a survey to address how Leiden University researchers regarded the SDGs in their own work. The guiding question of the survey was: how familiar are researchers within Leiden University with the SDGs and to what extent do they consider the SDGs in their research?

Reminder: The following report discusses a survey conducted in **November 2021**. Accordingly, the results of this research are indicative of researchers' opinions and mindsets at **that moment in time**. Further evaluations should examine whether these have changed since.

2. THE ROLE OF THE SDGS AT LEIDEN UNIVERSITY

In 2021, SDG-related research published by Leiden University contributed most to SDG 3 'Good Health and Well-Being', SDG 12 'Responsible Consumption and Production', and SDG 16 'Peace, Justice and Strong Institutions', in that order (VU Amsterdam, 2021). The topics of these SDGs are linked most prominently to the Medical Centre (LUMC) and the Faculties of Science, Social and Behavioural Sciences, Governance and Global Affairs, and Law. Within the Faculty of Science, the Institute of Environmental Sciences (CML), for example, conducts research on sustainable management of natural resources and environmental quality (CML, n.d.). The Faculties of Law, Social and Behavioural Sciences, and Governance and Global Affairs, in turn, all produce research related to law, politics and administration (Leiden University, n.d.-a). These research topics, as well as LUMC's obvious focus on health and well-being, all hold direct links to the SDGs.

In addition, the university occasionally takes part in the bi-annual Dutch SDG-Challenge, in which a team of students partners up with an external stakeholder (whether that be a public organisation or business) and delivers a plan detailing how to work on the SDGs within the external organisation. In 2021, Leiden University students designed a plan for the Dutch Postcode Lottery and the Dutch National Police (Soapbox, n.d.).

Leiden University also started the interdisciplinary research programme 'Liveable Planet – Sustainable Futures', whose goal it is to work "towards a society in which energy and raw materials are used in a way that preserves natural capital and keeps the impact on health to a minimum. To achieve this, the scientists first want to investigate how natural and economic ecosystems function and their impact on health and natural capital. They are also researching how social drivers affect the human ecosystem. Finally, they are exploring new types of government policies and transition management that will help us achieve a more sustainable society" (Leiden University, n.d.-d).

In conclusion, there are specific programmes and initiatives to further SDG-related research at Leiden University. Apart from these university-wide efforts to conduct research which might impact the SDGs, it remains unclear whether researchers at the university are generally aware of the SDGs and consider them when they design their own research projects.

3. METHODOLOGY

To address this knowledge gap, LUGO designed a questionnaire which was sent to researchers at all career levels within the university. The survey was spread via email and was only available in English. It consisted of 14 questions and took approximately 15 minutes to complete. The survey was not promoted as a 'sustainability survey', but rather as an 'education survey' or a 'survey about societal themes in education'.

LUGO decided to conduct a survey rather than ethnographic interviews for two reasons. First, as an organisation, LUGO was more interested in gaining a broad, instead of an indepth, understanding of whether and how researchers at the university consider the SDGs when they design their research projects. Second, LUGO hoped a survey would lead to better representation of what researchers at different hierarchical levels and within the different faculties of Leiden University think of the SDGs. Within the survey, the different hierarchical levels were labelled as:

- 1. PhD candidate,
- 2. Postdoc.
- 3. Assistant Professor,
- 4. Associate Professor.
- 5. (Full) Professor, and
- 6.0ther.

The survey was promoted in different ways. To encourage responses, LUGO distributed the survey making use of its personal, institutional, and organisational contacts as well as putting out a call for responses through relevant Teams and Slack channels, Facebook groups, and research groups. As a result, 211 responses were obtained for the survey, although only 202 of these were fully complete (valid).

There are limitations to survey research (including but not limited to dishonest answers, misunderstandings, low level of personalisation), but this method remains appropriate given the intent of the research, which was to gain a broad understanding of how individual researchers at Leiden University consider the SDGs in and during their research.

3.1 QUESTIONNAIRE CONTENT

The survey was built using Qualtrics and consisted of multiple parts. It started off with several questions on the survey participant's background. Specifically, the first set of questions covered their role within the university, their gender, and what faculty they were based at.

The second part of the survey focused on the participant's prior knowledge of the SDGs. Questions in this part of the survey asked if respondents had heard of the SDGs before, if they could define the term, and what came to their minds when thinking about the SDGs. The objective of this section was to provide a general overview of what researchers at the university already knew about the SDGs.

The third part of the survey consisted of two ranking questions. A first question asked respondents to rank the 17 SDGs from most to least important. A second question asked them to indicate if they agreed or disagreed with statements such as "I consider what impact it [my research] might have on the SDGs" and "it is very important to conduct research that touches on the SDGs."

The goal of the last part of the survey was to reveal to what extent researchers at the university already incorporate the SDGs into their research and if they face barriers in doing so. This particular part of the survey was intended to give an indication on whether the university needs to take action for researchers to be able to more effectively address SDGs in their research.

3.2 RESEARCH ETHICS

This research included ethical considerations for protecting the privacy of the participants. Respondents could only start the survey by agreeing to the survey conditions stated in a disclaimer. This disclaimer set out the purpose of the research and specified that participation was voluntary and anonymous. It also provided participants with LUGO's contact details, so that they could get in touch if they had any concerns or comments concerning the survey.

The survey programme Qualtrics was used for data collection. Leiden University has a data processing agreement with this firm, which helps protect the privacy of research participants.

4. RESULTS

Survey results were reviewed making use of Excel and Qualtrics report function. Descriptive statistics are presented in the following sections.

Most (just over 50 percent) of the respondents of the survey were based at the Faculty of Science, and 38 percent of the respondents were PhD candidates. This survey is, therefore, not perfectly representative of the university's academic staff.

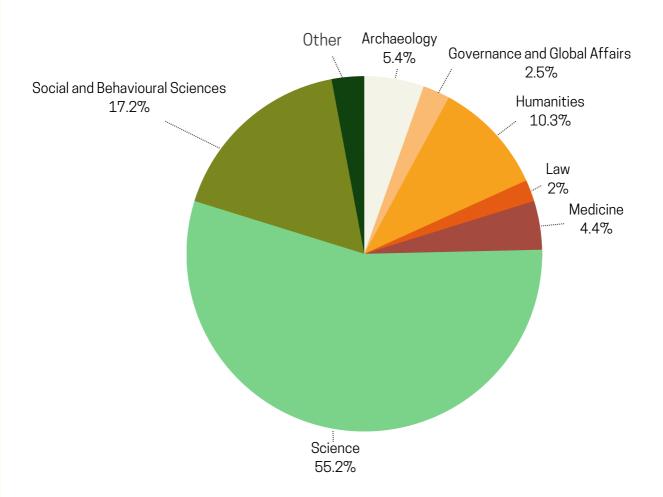


Figure 2. Pie charts of respondents' position and faculty association.

In total, we have collected 202 responses from researchers at Leiden University, out of which 76 were PhD candidates, 19 were Postdocs, 49 were Assistant Professors, 10 were Associate Professors, and 32 were full Professors. The remaining 15 participants stated that they did not belong to any of the groups named above. The survey has been answered by researchers from all faculties of Leiden University. In the survey these faculties were labelled as:

- 1. Archaeology,
- 2. Governance and Global Affairs,
- 3. Humanities,
- 4.Law,
- 5. Medicine.
- 6. Science.
- 7. Social and Behavioural Sciences, and
- 8.0ther.

Researchers working in multiple faculties chose this last ('Other') category and specified what faculties they worked in. The ratio between men and women was 101 to 93. Six respondents identified as non-binary or did not want to disclose their gender.

Out of the 202 responses, 50 percent stated that they were familiar with the SDGs. 29 percent said that they were not familiar with the SDGs and another 20 percent were not sure whether they knew what the SDGs were. After asking the respondents whether they were familiar with the SDGs, it was requested for them to outline, in three keywords, what came to their mind when they were thinking of the SDGs. Terms respondents mentioned particularly often were "environment", "sustainability", "pollution", "climate change", "poverty" and "economy". Respondents were also asked to name one or several SDGs. 'Zero hunger', 'no poverty' and 'clean water' were some of the most frequently cited SDGs. Finally, at the end of this second part of the survey, an official definition of the SDGs was included to make sure that in subsequent parts of the survey everyone was referring to the same working definition. Respondents were asked if they would be interested in learning more about the SDGs based on the definition provided. 50 percent declined this offer and stated that they were not interested in learning more about the SDGs.

In the third part, the survey addressed the importance of the SDGs more broadly and in research specifically. The respondents were asked whether they agreed with the following three statements:

- 1. 'When conducting research, I consider what impact it might have on the SDGs'.
- 2. 'For me personally, it is very important to conduct research that touches on the SDGs'.
- 3. It is very important that within the university research is conducted that touches on the SDG's.

The range of agreeing varied from 'strongly agree' to 'strongly disagree'. The results are depicted in Figure 3.

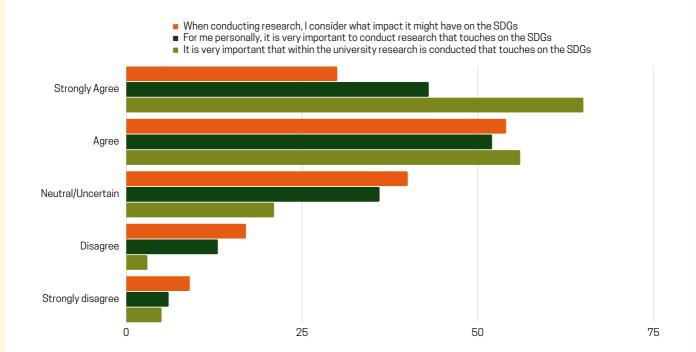


Figure 3. The importance of the SDGs from strongly agree to strongly disagree, according to respondents.

In this part of the survey, we also asked respondents to rank SDGs according to their perceived importance. 'No poverty', 'climate action', 'good health and well-being' were ranked most important. To get an impression of how frequently researchers relate their research to the SDGs, they were also asked to what extent they incorporated the SDGs in their publications. Although we recognize that publications are not the only type of research output that researchers produce, it is an indicator which is easier to quantify than others (e.g., lectures and teaching). 42 percent of the respondents said that they (almost) never include the SDGs in their publications. 17 percent said they relate a few (25 to 50 percent) of their publications to the SDGs. 15 percent of the respondents said that the majority of their publications referred to the SDGs and 26 percent indicated (almost) all of their publications are related to the SDGs.

The respondents were also asked if they agreed with the following two statements:

- 1. 'My supervisor encourages me to consider the impact my research might have on the SDGs'.
- 2. 'I face barriers when I try to incorporate the SDGs into my research'.

The possible range of agreement the respondents could indicate varied from 'strongly agree' to 'strongly disagree'. The answers given are presented in the table below.

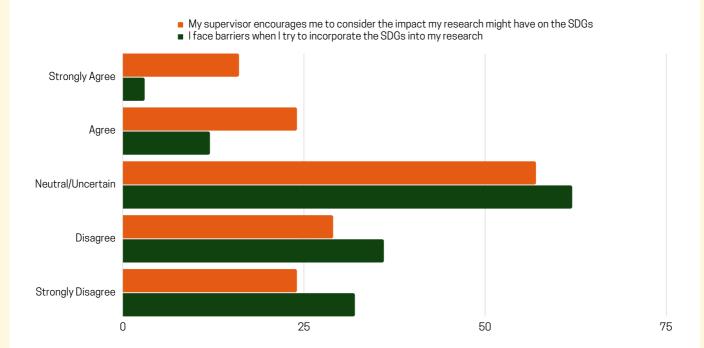


Figure 4. Agree or disagree, barriers to SDG research, according to respondents.

Related to the barriers question above, the respondents were asked to specify which barriers they faced while including the SDGs in their research. A few illustrating answers are disclosed in the next page. Some relate to research content, others to the way that research is conducted. All answers to this question can be found in the Appendix.

"SDGs are big and global. [It is] difficult to relate [them] to small scale projects."

"[There is] not enough awareness about the specific SDGs."

"Our research is so specific, sometimes it's hard to communicate how it relates to certain SDG[s]."

"Lack of emphasis in project planning of the need for specific attention to SDGs."

"Connection[s] to SDGs is implicit and not explicitly sought after. [There] is a lack of efforts [sic] in putting things into a broader SDG framework."

"I face barriers in my daily lab work routine: really poor management of disposable waste material. Lots of chemicals (even if considered not harmful) are routinely thrown into the sinks, in the institute [Archaeology] the recycling of paper and plastics is encouraged but very little facilitated (containers only in the hall/kitchen) and no dedicated bins of plastics exists. Also, in our floor's labs there is a tendency to leave lights and non-essential machines on. This is unacceptable in my opinion for a university that claims to be proactive towards sustainability topics."

"[There are] not proper waste bins to separate organic from plastic, not clear distinction at the Institute of Biology."

"The biggest barrier is the university and the EU. I wish I could compensate the times I have flown but that has sadly not been the case. I also think the university should preach by example and have a completely plant-based canteen."

"The key barrier is no time to do any research or to work on publications. I work about 400 unpaid over hours a year, and only receive 265 hours of research time. So, my research is basically a hobby I pursue in my spare time."

5. DISCUSSION

First, the survey results show that, although Leiden University has set up several SDGrelated programmes and initiatives, it seems like these do not necessarily translate into university-wide awareness for the SDGs. For instance, before taking this survey, 50 percent of the respondents were either unsure what the SDGs are or did not recognise the term at all. Considering that most respondents were based at the Science Faculty, this could indicate that especially the "hard" sciences lack knowledge on the SDGs. Second, given Leiden University's claim that the SDGs play an important role within its research, it is surprising that 42 percent of the respondents did not see a link between their publications to the SDGs. This could be explained by the fact that a big percentage of the respondents said that they are not encouraged by their supervisors to do so or even face barriers when they are trying to consider the SDGs in their research. According to respondents' comments in the last section of the survey, such barriers seem to relate to both research content as well as execution. For example, respondents said that SDGs are rarely considered during a project's planning phase, that there is generally too little knowledge about the SDGs to incorporate them into research and that poor waste management makes it difficult to engage in SDG-friendly research practices.

This provides opportunities for the university to improve policies regarding the SDGs. First of all, Leiden University should put greater emphasis on informing all researchers on the SDGs, particularly those that are not part of university-wide SDG-related programmes and initiatives. One way to do this, would be to organize regular SDG-centred workshops, conferences, and days. In addition, Leiden University should work towards removing the operational barriers that respondents of our survey have pointed to. Most of these, for example, inappropriate waste management and wasteful energy consumption, are practical and could be addressed if university and institute management made an effort to inform employees about the environmental consequences of unsustainable research practices.

Further research could be done on how to specifically increase Leiden University researchers' knowledge on the SDGs since the answers to this survey show that half of them are not familiar with the SDGs and are not sure how/if they are incorporated into their research. Moreover, additional research could help more clearly define and tackle the barriers that researchers experience at Leiden University.

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APPENDIX

Open answers to question 39: "Which barriers do you face while including the SDGs in their research"

- I face barriers in my daily lab work routine: really poor management of disposable waste material. Lots of chemicals (even if considered not harmful) are routinely thrown into the sinks, in the institute the recycling of paper and plastics is encouraged but very little facilitated (containers only in the hall/kitchen) and no dedicated bins of plastics exists. Also, in our floor's labs there is a tendency to leave lights and non-essential machines on. This is unacceptable in my opinion for a university that claims to be proactive towards sustainability topics.
- My research is on Education for Sustainable Healthcare in GP residency, I often get the feedback: The curriculum is already packed, we don't have room/time/money for it to be incorporated
- No one really care about energy waste
- I just want to specify that I incorporate the values of the SDGs into my research because of those values and not particularly because they are articulated in the SDGs. I would prioritize these values to the same extent even if the SDGs did not exist.
- Lack of emphasis in project planning of the need for specific attention to SDGs
- Alternative, more sustainable laboratory consumables tend to be more expensive
- Connection with SDGs is implicit and not explicitly sought after. Lack of efforts in putting things into a broader SDGs framework
- No. There is no explicit focus on SDG, but in a way all my research contributes to solving some issues
- Relevance
- SDGs are big and global, difficult to relate to small scale projects
- Not enough awareness of the specific SDGs
- My supervisor prefers to use plastics rather than recyclable glassed for experiment
- Our research is so specific, sometimes it's hard to communicate how it relates to a certain SDG

- You asked if I am familiar with this scheme; I answered "no" but still got these
 questions. That makes sense how? Also, there seems no place here to recognize
 that research is to understand things and not for a social or political agenda. Also,
 since the software demands that you answer all questions and there is no room for
 "not applicable" it seems like you don't accept at all that people simply don't share
 your values at all.
- Not proper waste bins to separate organic from plastic, not clear distinction at IBL.
- The biggest barrier is the university and the EU. I wish I could compensate the times I have flown but that has sadly not been the case. I also think the university should preach by example and have a completely plant-based canteen.
- The key barrier is no time to do any research or to work on publications. I work about 400 unpaid over hours a year, and only receive 265 hours of research time. So my research is basically a hobby I pursue in my spare time.
- The SDGs are not so relevant in my field of research. Incorporating these in scientific research will not generate impact. The connection to SDGs is thus an indirect (but not insignificant!) contribution. If you experience barriers, could you please specify which ones?
- · Low interest.
- My expertise is not visibly and directly related to one of the SDG's, although there
 are links. However, trying to connect better in research proposals leads to referee
 comments in the general area 'not strong, unrealistic, irrelevant, not really useful'.
 Staying away from that discussion improves my funding chances.
- I neither experience them, not do I impose them (as a research supervisor). However, LU and NWO could more actively promote the SDGs and support research associated with them.
- Sometimes it is difficult to see the link of my research topic with the SGDs.