



YouCount
Youth Citizen Science

D6.6

Recruitment and consent procedures

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Table of Contents

D6.6 RECRUITMENT AND CONSENT PROCEDURES.....	4
EXECUTIVE SUMMARY	6
1 INTRODUCTION	8
1.1 Implications of ethical principles for the YouCount research project	9
1.2 Vulnerability of young research participants	10
2 PARTICIPANTS IN THE YOUCOUNT RESEARCH PROJECT.....	13
3 RECRUITMENT CRITERIA AND PROCEDURES.....	15
3.1 Recruitment criteria	15
3.2 Recruitment procedures	16
3.3 Informed consent procedures.....	20
4 CONCLUDING NOTES	23
5 REFERENCES	24

List of Tables

TABLE 1. REVISION HISTORY	5
TABLE 2. TERMS AND ABBREVIATIONS.....	5
TABLE 3. VULNERABILITY BACKGROUND OF THE YOUCOUNT RESEARCH PARTICIPANTS	11
TABLE 4. RECRUITMENT PROCEDURES OF RESEARCH PARTICIPANTS IN THE CASE PARTNER RESEARCH TEAMS.....	17

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D6.6 Recruitment and Consent Procedures

This deliverable provides a more detailed description of the criteria and procedures that will be used to identify and recruit participants in the project. In particular, it specifies the standards and procedures for the recruitment and consent of young citizen scientists, who will fill the roles of both research participants and researchers. The purpose is to ensure that the project activities are in line with the ethical principles and standards for citizen social science (CSS), in addition to legal standards. In addition, the deliverable outlines items of informed consent and the institutional measures that will be enacted to safeguard the research participants' rights and freedoms.

The deliverable will be used in WP1, Developing a Conceptual and Methodological Framework for Youth Citizen Social Science (Y-CSS), and WP2, Implementation of the Multiple Case Study. The deliverable comes in an early stage of the process and will thus be followed up on during 2021 to complete all written consent forms and secure the necessary approvals before the data collection starts (D2.1). As some ethical issues described in this report are related to personal data handling, the report draws on D7.1 Ethics POPD Requirement No. 2 and D6.2 Data Management Plan (DMP). Moreover, this report will provide a basis for D6.5 Final Report on Ethical Issues, which will be produced at the end of the project. It also relates to D1.2 Report on the Conceptual, Innovative, Evaluation and Ethical Framework for Y-CSS, which, as the title suggests, will present an ethical framework to address other ethical issues related to Y-CSS.

Project aim in a nutshell. The vision of YouCount is twofold, addressing and combining both the scientific and societal needs of our time. On the one hand, the project advances CSS as a social research methodology, reaching out for a more egalitarian way of conducting science. On the other hand, it is an instrument of transformation and social impact aimed at increasing social inclusion of European youth with disadvantages and producing social innovation.

Table 1. Revision History

Version	Date	Created by	Comments
1.0	12/07/2021	Partner 7, KTU	Structure and content of the deliverable in collaboration with partners
2.0	20/07/21		First complete version after inputs/review of partners
3.0.x	30/07/2021	Partner 7, Raminta Pučėtaite	Final version submitted

Table 2. Terms and Abbreviations

Abbreviation	Full term
CS	citizen science
CSS	citizen social science
C-YCS	young citizen scientist from the local community or targeted organisation (lower level of participation)
D	deliverable
DMP	data management plan
DPO	data protection officer
EC	European Commission
EC-GA	European Commission - Grant Agreement
EU	European Union
GDPR	General Data Protection Regulation
LL	living labs

NGO	non-governmental organisation
NSD	Norwegian Centre for Research Data
RRI	responsible research and innovation
R-YCS	young citizen scientist participating in the research team
SEB	Safety and Ethics Board
YCS	young citizen scientist
Y-CSS	youth citizen social science
YouCount app	'YouCount CSS app' on the SPOTTERON Citizen Science Platform
WIC	written informed consent

Executive Summary

This deliverable specifies the principles, standards, and procedures for the recruitment and consent of participants in multiple case studies. In particular, it focuses on the principles, standards, and procedures of recruiting young citizen scientists (YCS) who may be vulnerable and their consent procedures. The project consortium is committed to research ethics principles, such as respect for research participants, voluntariness of participation and informed consent, and participant welfare. The implications of these principles for the project's research participants are discussed. Unlike traditional research methodologies, citizen science may require additional consideration of how ethical principles are balanced and applied in research practice. For example, some dilemmas may be posed by integrating the principles of welfare and confidentiality, obtaining informed consent from research participants who are minors and their legal representatives, and making children's voices heard. This is very relevant, as five of the nine case studies to be employed in the project to improve social inclusion via civic and social participation, sense of belonging, and connectedness will engage research participants who are younger than 18 years of age. Age as a factor of vulnerability intersects with other social characteristics, such as migrant or refugee background, weak command of the researchers' language, learning difficulties due to physical disabilities, geographical location, and economic and educational disadvantages.

The criteria and procedures of recruitment and informed consent mostly deal with YCS, as they are potentially the most vulnerable group. The project team will aim to recruit YCS who belong to the target group based on age (13–30 at the time of recruitment) and will ensure gender diversity.

Selected research YCS (R-YCS) will work closely with national research teams to select and coordinate community YCS (C-YCS). Therefore, their social skills; commitment to ethical values; ability to speak French, Arabic, or English, depending on the migrant/refugee communities they will be working with; and willingness to write a thesis based on the project data (if students are recruited as R-YCS) will be the main criteria for recruitment and selection. Other stakeholders, such as local or national stakeholders or international advisors, evaluators, and participants in local living labs (LLs), will be selected based on their relevance to community issues, familiarity with the topic, and willingness to engage in the co-creation of social innovation and policymaking.

The project team will make use of open and targeted invitations, as well as snowball sampling or a stepwise process to recruit the participants. In many cases, first contact will be made via local or national organisations to recruit participants for further information or direct them to self-register with the research team or via the YouCount Citizen Social Science app on the SPOTTERON Citizen Science Platform (as agreed in each case). R-YCS will play a key role in recruiting other youths. Informed consent will be acquired before data collection begins from both research participants and their legal representatives, if national legislation obliges when involving minors. In general, the informed consent form will follow the requirements of the General Data Protection Regulation (GDPR). Processual informed consent will be used to ensure the welfare of the research participants. For example, the research participants will read and comment on the findings and discuss any sensitive textual or visual information that they think may cause harm before it is made public.

Finally, the project coordinator, OsloMet, will apply to the Norwegian Centre for Research Data (NSD) for ethical clearance for the whole project. Its ethical approval will also apply to the project partner institutions, which will collect empirical data but will not have an appointed research ethics commission/ethics review board or data protection officers. Otherwise, institutional research ethics commissions/boards, data protection officers, and the project Safety and Ethics Board (SEB) will be consulted by the project partners if any sensitive questions arise.

1 Introduction

Citizen science (CS) is a relatively new methodology compared to some other more established methodologies with codified procedures and benchmarks of excellence (Rasmussen, 2019). Differing from more established methodologies, research participants in CS have dual roles; that is, they are not merely data subjects but also serve as researchers. CS realises the principles of responsible research and innovation (RRI), such as diversity of voices and inclusivity or reflexivity. Therefore, it has strong potential to advance scientific knowledge by addressing the blind spots of traditional methodologies. However, as CS draws on the principles of open science, such as the democratisation of research, transparency, and collaboration (Pontika et al., 2015), it gives an impetus to revisit the traditional ethical principles of research, such as confidentiality or potential harm to research participants. Challenges in CS research may arise from a lack of research participants' knowledge and skills regarding the demands of research when agreeing to join the community of young citizen social science (CSS) researchers, which may result in conflicting social roles and depletion of resources. Challenges may also arise in the consortium if the research participants' motivation is not considered. Therefore, this report describes the principles, standards, and procedures for identifying, recruiting, and obtaining informed consent from CSS. As the project aims to represent the diversity of voices of young people, and marginalised ones in particular, special considerations are given to their vulnerability, both as given and situational characteristics.

In sum, the report is intended to ensure that ethically sound research is conducted by professional teams of researchers in the YouCount project. By ethically sound research, we mean research based on the key (traditional) principles of ethical research, including respect for research participants and informed consent (Vanclay et al., 2013); the principles of RRI, including anticipation, inclusion, reflexivity, responsiveness, and stakeholder engagement (Lubberink et al., 2017; Stilgoe et al., 2013); and the recommended standards for CS research, including inclusivity, adaptability, sensitivity, safety, and reciprocity (Chesser et al., 2020).

The report is structured as follows: First, principles and standards for ethical CS, as well as aspects of youth vulnerability, are briefly discussed. Second, groups of participants are described, and their roles in the project and vulnerability are considered. As mentioned above, special attention is paid to methods of mitigating the vulnerability of the YCS. Third, recruitment criteria and procedures, including those related to informed consent, are described. Finally, the report concludes with considerations regarding other (institutional) measures to be used by the project partners to seek advice in complex situations and to safeguard the rights and freedoms of the research participants.

1.1 Implications of ethical principles for the YouCount research project

Drawing on Vanclay et al. (2013), the key ethical principles for research involving human subjects in social science research are respect for research participants and informed consent. They presuppose all other principles, including specific permission required for audio or video recording, voluntary participation and absence of coercion, participant right to withdraw, full disclosure of funding sources, no harm to participants, avoidance of undue intrusion, no use of deception, the presumption and preservation of anonymity, participant right to check and modify a transcript, confidentiality of personal matters, data protection, enabling participation, ethical governance, provision of grievance procedures, appropriateness of research methodology, and full reporting of methods.

As several research participants in the YouCount project will be vulnerable youths with physical, social, and economic disadvantages, the project partners will make efforts to take precautionary measures so as not to cause harm to them. They will treat participants with fairness to guarantee that they feel respected and that their efforts in participating in the research are duly acknowledged.

Respect for the research participants in the project practice will entail guaranteeing their anonymity and the confidentiality of the provided private data. For example, if needed, research participants will be advised to use nicknames when registering for the project platform on the YouCount Citizen Social Science app (henceforth abbreviated to 'YouCount app') on the SPOTTERON Citizen Science Platform so that any unintended negative consequences from revealing personal data are avoided. The consortium will make an effort to raise the awareness of the researchers regarding the line between the project activities and research participants' private issues that are not relevant to the project (data minimisation). Specific approval for audio or video recordings or photography will be handled by the project partners.

Considerations of respect for research participants, their welfare, and justice as research ethics principles highlight the need to consider how participants will be compensated for their time and certain expenses, such as transportation costs (cf. Chesser et al., 2020). This issue will be discussed in the ethics framework in D1.2.

Although the project team is interested in keeping the recruited research participants in the community of practice, they are also aware that participants' motivation may change due to life circumstances (e.g., a newly found job) or family duties. Therefore, the project team will not create any barriers for the research participants to withdraw from the research and project. In this way, participants' right to lead their chosen life course will be ensured.

The consortium will also take due care to use validated methods and instruments in the studies so as not to waste the research participants' time in producing data that has little academic or societal value. Considerations will be given to thoroughly reporting the methods used in the case studies to enable replication of the research, conducting a peer review of the adequacy and ethicality of the methodology, and encouraging researchers' critical self-reflection on the limitations of the methodology and co-evaluation of the project outcomes.

Although research ethics principles that apply in more established methodologies are undeniably important, their application to CS as an open science methodology is not clearly defined. Some of the concepts in research ethics, such as vulnerability, and principles such as confidentiality or anonymity have to be revisited due to the complexities of research in practice. These complexities are discussed in the following section.

1.2 Vulnerability of young research participants

As noted by Bracken-Roche et al. (2017), although vulnerability is a common term in research ethics, there have been few attempts to define it. This is due, in part, to the complexity of the term; it may be perceived as a categorical and a contextual characteristic of certain social groups (Gordon, 2020). Contextuality is defined by the relation of the individual (i.e., research participant) to his or her environment or particular research setting (Luna, 2009), which may be dynamic and shifting along with the research process.

It is generally assumed that vulnerability is “an identifiably increased likelihood of incurring additional or greater wrong” (Hurst, 2008). The reasons for research participants' vulnerability may stem from their inability to make autonomous decisions, which may inflate expectations about the benefits of participating in the research; their inability to give informed consent due to low language aptitudes or learning difficulties; a lack of voluntariness to engage in research; or stigmatisation and discrimination, which may occur as a result of research designs (Panelfit, 2021; cf. Bracken-Roche et al., 2017). Based on these categories, the number of vulnerable groups may be as large as 32 (Bracken-Roche et al., 2017) and include geographically, educationally, and economically disadvantaged persons, homeless people, refugees, children, minors, young as well as elderly people, and persons with cognitive impairments or intellectual disabilities.

Some of these groups are represented in the YouCount project, which will attempt to address three domains of social inclusion: 1) social participation (e.g., work, education, and social life); 2) connectedness and social belonging; and 3) citizenship and rights. In total, nine case studies will be conducted in different European countries, involving diverse young people through a multiple case study. Specifically, five cases will recruit YCS under 18 years of age: Sweden (13+), Denmark (15+), Norway (16+), Hungary (14+), UK (15+). The other cases may engage YCS who are younger than 18

years, but they will not be numerous. Therefore, as indicated in Table 3, age is the key aspect of the potential vulnerability of the research participants, affecting the ability to give informed consent both legally and socially. The research participants' age intersects with economic and educational disadvantages, potentially traumatising experiences (e.g., refugees), and stigmatisation (e.g., Romani people).

Table 3. Vulnerability Background of the YouCount Research Participants

Dimension of social inclusion	Case country	Characteristics of the youth group as YCS	Vulnerability aspects
Social participation	Norway	Youth from a disadvantaged inner-city urban area, several with migrant backgrounds	Under age 18, awareness and understanding capacity affect the ability to give informed consent
	Spain	Unaccompanied minor migrants who have turned 18	Migrant background or refugee status, economic or social (e.g., educational) disadvantages, insufficient skill in the host country language, all affect the voluntariness and ability to give informed consent
Civic engagement and social participation	Denmark	Youth from a disadvantaged urban area, low level of education and rate of employment	Physical disadvantages (e.g., hearing impairment), resulting in learning difficulties and educational achievements, affect the ability to give informed consent
Civic engagement	Sweden	Youth from a disadvantaged suburb area, several with migrant backgrounds	Ethnic (e.g., Romani), geographical (e.g., rural), and social (e.g., migrant) backgrounds as reasons for stigmatisation and discrimination
Citizenship and rights	Austria	Newly arrived young refugees	
Connectedness and sense of belonging	The UK	Youth from a disadvantaged regional area	
	Lithuania	Youth from a disadvantaged rural area	
	Hungary	Youth from disadvantaged regional/rural areas with many Romani youths, several with hearing disabilities	

	Italy	Migrants in certain urban areas, several refugees	
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Traditionally, children and adolescents are regarded as a social group whose protection has to be thoroughly considered. The project team will consider this aspect by preparing an information letter addressed to the children's parents so that they can grant their consent as well. However, protectiveness of this group may result its voice being eliminated from research. For example, if adults from migrant or refugee communities distrust public administration subjects, including research institutions, they may refuse to give their informed consent for their child's participation even when the child is willing to engage in CSS. This is against the democratisation of science and a restriction of a child's right to participation, as outlined by the UN Convention on the Rights of the Child (1989). For example, the willingness of a teenage girl to participate in a case-related social participation activity in her community may be restricted by the refusal of her parents to give their informed consent due to cultural norms and beliefs about proper gender behaviour.

Economic, educational, and geographical disadvantages may also make research participants vulnerable due to the risk of stigmatisation if the project findings reproduce social stereotypes, do not produce an expected social change, or otherwise strengthen negative labels (cf. Reid and Brief, 2009). This risk will be addressed by (self-)reflexivity and anticipation in the project team working on the methodologies of the case studies so as not to categorise research participants as having stereotypical disadvantages.

Moreover, this aspect of addressing vulnerability requires reconsideration of the values of confidentiality and anonymity. When signing informed consent forms, participants may not consider all the risks that could arise during the research process. To address this issue, the project team will share the research findings with the research participants before the findings are made public so that they can comment on and choose whether they wish to remain anonymised. Therefore, the project team plans to use stepwise informed consent to allow the research participants to reconsider the use of their personal information and the form in which the findings will be made public. In any case, datasets produced by the project and made public will be anonymised.

Considering the language aptitudes that may undermine participants' ability to provide informed consent, making them vulnerable or excluding them from research, the project teams will make sure to have a researcher who speaks the research participants' language. If this is not possible, one of the partners will hire translation services (as in the case of Hungary) to ensure that research participants' voices are heard and counted (i.e., guaranteeing their inclusivity).

In sum, vulnerability in the project practice will be considered contextually, following a case-by-case principle.

2 Participants in the YouCount Research Project

Youths will participate in the project as YCS in two ways: young people from the community and university students will participate in the whole research process as citizen scientists (R-YCS) in the research teams. A larger group of youths will serve as community citizen scientists (C-YCS) at a lower level of participation by contributing data about the positive drivers of social inclusion on the YouCount app. YCS will also provide their perspectives on social inclusion and targeted solutions by participating in local dialogue forums (e.g., group conversations or ‘listening’). Each case will establish local LLs with multiple stakeholders in the wider community or targeted stakeholder organisations, which will use the data provided by the participating YCS to co-create policies and innovations in terms of new ideas, products, or methods to create social change.

The range of participants to be recruited for the YouCount project includes:

- Researchers in each case study.
- Young people (13–30 years of age at the time of recruitment), either as R-YCS or C-YCS, both referred to as YCS.
- Local stakeholders participating in the local LLs (e.g., community administrators, policymakers, social workers, local social entrepreneurs, local influencers, youth councils/centres, non-governmental organisations [NGOs], youth/migrant organisations, city museums) or local stakeholders that will be included in the evaluation study (outcomes of the case).
- National stakeholders, such as policymakers, public authorities, NGOs, academics, influencers, and migrant and disability organisations, who will participate in the project as trainers, providers of feedback on the outcomes of the case studies and co-creation, and participants in the LLs. They will also disseminate project information to their stakeholders.
- Project Advisory Board (AB) and Safety and Ethics Board (SEB) members who will assist the research team by providing advice on research and social change making, identifying (ethical and other) risks, and considering their mitigation measures.

The stakeholders who hold more power will be identified and asked to engage based on the researchers’ networks and publicly available information about official positions in formal organisations. Local stakeholders will also be identified either via publicly available information about positions held in public administration institutions, such as municipalities or elderships, or by distributing information about the opportunity to engage in the formed community via different information communication means, such as local newspapers, leaflets, and posters distributed in schools, churches, culture or youth centres, elderships, and so forth.

The ultimate goal of the research team is to ensure that the participation of all stakeholders is continuous (without raising barriers to withdrawal). Therefore, it will be important to provide sufficient information about each stakeholder’s role and function in the project through different

channels, such as the project website, information letters, and meetings, at the beginning of the case study to secure motivation.

The stakeholders in the community and stakeholder organisations will invest their time in the co-creation of social innovation, policymaking, and the co-evaluation of the project outcomes. They are less vulnerable than the youths, but in some cases, potential harms could be very specific. For example, local stakeholders engaged in the project, such as business owners or farmers, could be excessively approached by other community members with requests to donate to local events or personal needs. The project team will address this aspect during research planning and in the YCS training. The project does not have a budget to compensate these stakeholders for their time. Yet, where possible, each partner will try to arrange some compensation (e.g., traveling expenses and social gatherings). In all cases, acknowledgement of input in the project communication and letters of gratitude will serve as gestures reflecting their involvement in the ethical principle of justice in the project.

As YCS are the most vulnerable participants due to poverty, migration, disability, unemployment, or living in disadvantaged urban/rural areas, as discussed in section 1.2, the research team will mostly address this group's vulnerability in the recruitment and informed consent procedures described in Part 3.

3 Recruitment Criteria and Procedures

The project team will carefully choose the recruitment methods and implement informed consent procedures to ensure respect for the research participants and their voluntary participation. They will adhere to the GDPR, national regulations, and ethical guidelines concerning potentially vulnerable groups and underaged participants in research in the participating case countries. Caution will be taken when obtaining consent from adolescents since they are less mature than adults, and youths with vulnerabilities due to disability, low levels of literacy, or living in a disadvantaged area, since this might affect their sense of voluntariness and capacity for providing informed consent.

3.1 Recruitment criteria

The recruitment criteria for the multiple case study and evaluation study are based on the general and specific objectives of the study and are targeted at the youth group and stakeholders in each case study, as elaborated on in the grant agreement with the EC and the data management plan (DMP). These criteria include:

- All participants must be capable of giving autonomous informed consent.
- Researchers must possess a research interest in CS, participative research methods, and social impact making.
- YCS must belong to the targeted youth population and age group (13–30 years of age at the time of recruitment) and reflect a mix of genders.
 - R-YCS, in addition to the criteria mentioned above, must have personal skills (e.g., attention to detail, leading the teams, networking, and building relationships) that enable them to work as citizen scientists.
 - Preferably, R-YCS should be pursuing master's-level programmes in social sciences (e.g., social work, public administration, creative industries, sustainability), but they could also be motivated BA students in social sciences. Although representatives of social sciences are preferable, motivated students from other (e.g., physical, natural) science fields, as well as more advanced students at the PhD level, are also eligible to apply. Student interest in writing a thesis based on the project data (with additional approvals) will be considered an asset. This criterion will be considered in light of the other criteria.
 - Preferably, R-YCS should be interested in participating in the project for a longer period of time to contribute to the efficiency of the project.

- R-YCS in some partner countries should have language skills in Arabic/French and English for communicating with target communities, controlling the YouCount app, and participating in project meetings.
- Local and international stakeholders who are establishing and participating in the local LLs (e.g., meetings, workshops) must be related to the case topic/issue (e.g., be representatives of local targeted communities or public organisations or international organisations working on the topic of youth social inclusion, social innovation, social transformation, or related topics), be interested in using the LL for innovation, be willing and have the capacity for policymaking and community development based on inputs from YCS and to implement positive project results in future work.
- Local and international stakeholders evaluating the outcomes of the studies must come from the wider community/organisation related to the issue of the case study.
- National stakeholders must be interested in collaborating with national project teams and possess dialogical skills.
- Other project members, such as AB and SEB members, must have knowledge of the topic/issue explored by the project and participative research methodologies and their ethical implications, and must be motivated to serve as key informants for evaluating the project and assessing the costs and benefits of CSS.

3.2 Recruitment procedures

The project team will use a combination of recruitment strategies and procedures. These will be conditioned by each case study; that is, whether the research team builds on their established relations in the local community/organisation or starts from scratch.

In all cases, recruitment will combine three approaches:

- Open invitations, which will mostly be used to recruit C-YCS. Leaflets, flyers, social media and network posts, and posters with written informed consent forms will be distributed to the target communities or at relevant places in local settings, as recommended by the relevant literature (Bonney et al., 2009). Information will also be communicated at relevant youth events. This approach may also be used to recruit R-YCS and attract more stakeholders to LLs as well. Open invitations will be followed by the candidates' independent initiatives to contact research teams or self-register on the YouCount app.
- Targeted invitations, which will be directed at R-YCS, local, national and international stakeholders in LLs or evaluation of the project outcomes. In the latter case, national research teams will use their local knowledge and networks to engage target communities/organisations in their case (e.g., national/local organisations for refugees,

youth centres, organisations for youth with disabilities) through written and oral information and meetings. Some of these organisations have already expressed their consent to support the project in the application process.

- Snowball sampling or chain-referral sampling will be more widely used to recruit C-YCS. For example, R-YCS will spread the word among their friends in the target group, with new C-YCS spreading the word further; this may also be applied to other participants in the project.

Generally, some participants in the case study will be invited directly, while others will be recruited through open invitations and 'self-registration' via the YouCount app or by approaching the recruiting teams based on the distributed information. R-YCS will be recruited through more targeted and extensive invitations and recruitment procedures, since they will have a more responsible and long-standing role in the project compared to the other participants.

More specific approaches and methods to be used by partner institutions in recruiting research participants (specifically YCS, including R-YCS) are outlined in Table 4.

Table 4. Recruitment Procedures of Research Participants in the Case Partner Research Teams

Institution	Main recruitment procedures	Who will recruit and select the R-YCS	Who will invite the YCS
OsloMet	Targeted invitations, social media outreach, and other means that the R-YCS find useful/valuable	The community connector from the stakeholder organisation Tøyen Unlimited, in close collaboration with the case leader in Oslo	The community connector from Tøyen Unlimited
VA	Targeted recruitment	Researchers and the development manager in Botkyrka Youth Council	Botkyrka Youth Council and R-YCS
SH (Same case as VA)	Targeted recruitment	Researchers and the development manager in the Botkyrka Youth Council	Botkyrka Youth Council and R-YCS

UCLan	<p>Targeted recruitment events/workshops</p> <p>Open invitations combined with networks of youths/R-YCS</p>	<p>Researchers with the support of students and local youth leaders</p>	<p>The research team including the R-YCS working with local community youth leaders and others to identify young people from the target communities</p>
FD	<p>Mainly targeted and snowball recruitment</p>	<p>Two locally collaborating NGOs and the research team</p>	<p>R-YCS with support of the NGO and research team</p>
UNIVIE	<p>Open and targeted information and invitations (e.g., social media/through migrant organisations)</p>	<p>Researchers and people in collaborating organisations</p>	<p>Researchers via youth and migrant organisations from local to national levels</p> <p>Combination of researchers inviting YCS directly and participants recruiting others</p>
KTU	<p>Targeted invitations and self-registration</p> <p>Snowball recruitment</p> <p>Open invitations (posters on the school billboard, local community centres, elderships, youth centre Facebook profile and website, etc.)</p> <p>Meetings and motivational interviews</p>	<p>Collegial board consisting of KTU researchers, municipality, NGO (e.g., Ramygala youth centre) representatives</p>	<p>The municipality will forward the invitation to school administrations and teachers who will communicate the information further to potential candidates</p> <p>C-YCS will be recruited and selected by R-YCS and KTU researchers</p>
AAU	<p>Targeted and open invitations through flyers in the area and visiting local youth initiatives</p>	<p>Research team</p>	<p>Research team with local partners, e.g., youth clubs, local initiatives</p>

	<p>Self-registration via mail, messenger, or SMS</p> <p>The citizen scientists are recruited in collaboration with local partners, e.g., youth clubs, local initiatives</p>		
ESSRG	<p>R-YCS: Local Facebook group, direct invitation (home visit, messenger), demo workshops, formal contract</p> <p>C-YCS: Targeted direct invitations and snowball recruitment. Open invitations on Facebook posts</p>	Researchers	The research team, including R-YCS
UNINA	Open and targeted invitations	The research team in collaboration with local associations	The research team, including R- YCS

For all case studies, the recruitment of YCS will be stepwise in nature, starting with recruiting some key youths (R-YCS) in the local community/organisations or research centres/faculties at the university. About two R-YCS in each case will be recruited from the university. The students will be recruited through presentations at the beginning of the semester, announcements, shared e-mail lists with information, or other university events/networking. All R-YCS will undergo a personal interview with researchers before deciding whether to participate. R-YCS will cooperate with researchers and other stakeholders (if relevant) to recruit and select C-YCS. They will also use their own networks to distribute information about the project and recruit candidates.

R-YCS will have a key role in the recruitment of other youths to the study (C-YCS). In addition, when recruiting C-YCS, most partners will approach a local community (e.g., school, eldership, NGO) to invite candidates. In such cases, candidates will be informed about the research via community leaders or community/organisation administration. In school settings, once consent to

distribute the information to students' parents is given by the school administration, the researchers will ask teachers and class supervisors to circulate the information about the research to the students (cf. Kaufman and Ramarao, 2005). If interested, C-YCS or their parents/guardians can contact the researchers, who will follow up with more information. This will eliminate the possibility of community leaders or researchers putting pressure on potential candidates to participate, thus respecting the principle of voluntariness of participation.

3.3 Informed consent procedures

Participation in the YouCount project will be voluntary. During the recruitment interviews of R-YCS and when selecting C-YCS, prospective participants will be encouraged to ask questions and voice any concerns they have about participating in the research. The researchers will be honest and open in their answers.

Since five out of nine case studies will involve underaged participants, their consent as well as their parents/guardians' consent to personal data collection will be specifically addressed in the project, following GDPR Article 38–43. As the GDPR does not regulate the legal capacity of children to consent to data processing and research participation, the partners will follow their national legislation related to informed consent. The need for parental/guardian consent will be determined in collaboration with the Norwegian Centre for Research Data (NSD), the national body for data management in the project coordinator's country. This will depend on the role of the YCS, the kind of data collected, the sensitivity of the data, and data flow once the research design is finally decided. This particularly applies to the R-YCS, who will have a more extensive role during the project than just being traditional data subjects and informers. All partners will obtain informed consent from their research participants and consent from parents/guardians if necessary prior to the research activity (such as interviews, observation, photos). Based on the research findings, additional consent will be collected to make the findings public.

The consent form will be provided in an intelligible and easily accessible format to ensure that the research participants are fully aware of the purpose of the data processing. The outline of the consent form provided to the research participants and their parents/guardians will be adapted to the research participants and will use plain language that can be easily understood by the research participants. The information will be adapted to the age, level of literacy, and physical (i.e., visual) impairment of the research participants and their parents/guardians to ensure they obtain an adequate understanding of the research and the consequences of their participation. The consent form will contain the following items, as set out in the GDPR:

- A short introduction to the project (description, duration, conducting organisation);

- The main scope, aims, methods, duration, risks, and implications of involvement in the project;
- Background on which research participants are being selected (with special attention to the manner of description so as not to stigmatise the participants);
- The activities they are being asked to participate in;
- The fact that the participant may withdraw from the research; and
- Guarantee of anonymity and confidentiality.

In addition, the consent form will describe the following:

- The circumstances under which a research participant will be able to access the provided information;
- The collection and storage of personal data in password-protected institutional databases, the period of storage of empirical data (five to ten years after the project completion) and possible use for future research;
- Contact information for the data controllers and data protection officers who can be contacted for clarification or advice or to address grievances if they have occurred.

Furthermore, participants will be informed that they or their legal representative may request that their data be deleted if it has not yet been used in publications or presentations.

Moreover, the consent form will detail several aspects, including:

- A general consent to participate based on the understood information;
- Confirmation that the research participant and his/her parents/guardians have understood the voluntariness of participation and the possibility of withdrawing consent at any time without any implications for them;
- Consent to transfer anonymous/de-identified (only ID number) data to other responsible researchers within and across partners; and
- Consent to the data collection methods in each case study (e.g., use of audio recordings, illustrative pictures).

If a research participant's literacy level does not allow them to sign the WIC, it will be read in person, and the expressed consent will be audio recorded. The informed consent and privacy policy are also included in the YouCount app and project home page, and consent can be expressed by ticking boxes if the information has been read and understood. The general rule is that informed consent will be documented by the participant's WIC or through witnessed or recorded oral consent and, for minors, by parental/guardian signature. The YouCount researchers have the responsibility to determine the ability and competence of the individual youth for giving his or her consent or assent. All case partners will also provide oral information to the youths and

stakeholders on a local level throughout the project period as needed and will ask for new consent when necessary.

Collected WICs will be kept on file at each partner institution in a secured physical or digital room, apart from the raw data, and destroyed according to ethics approvals. Personal data (such as scrambling keys or important audio recordings) will be stored securely by some partners from five to ten years after the project closure, as agreed upon by the national supervisory authority. However, the data subjects will have the right to request the deletion of their personal data at any time.

Efforts will be made by the project team to ensure the voluntary nature of participation throughout the entire research process and to underline the possibility of withdrawing consent at any stage without negative implications. Withdrawal will be made easy, with participants simply required to send an e-mail to the responsible researcher asking that their data be withdrawn from the database. This might be particularly important for young and disadvantaged groups of youths who might be more vulnerable and afraid to decline participation if they feel dependent on the practitioners or their friendships with their peers. Based on previous research on vulnerable youths (Norvoll, 2007), researchers and R-YCS will be trained to look for non-verbal cues and body language conveying reluctance, since the invited youths might find it hard to refuse participation directly.

Institutional data protection policies and officers will be responsible for ensuring the security of the personal data, including protection against unauthorised or unlawful processing and accidental loss, destruction, or damage, using appropriate technical or organisational measures (see D6.2 DMP for more). In addition, the participants' rights and freedoms will be safeguarded using the following organisational measures:

- Consultations with the national or institutional data protection officer
- Institutional equipment for data collection (e.g., voice recorders, cameras)
- Institutional password-protected cloud for data storage
- Institutional and project training for researchers on data collection, processing, and storage

4 Concluding Notes

The project coordinator, OsloMet, will apply to the NSD for ethical clearance for the whole project and the Norwegian case. The NSD will serve as the lead supervision authority for the YouCount project before data collection begins and will also send updated notifications as the project evolves. The NSD will assist the coordinator in obtaining ethical approval for the YouCount project. Its decision will also apply to the project partner institutions, which will collect empirical data but will not have an appointed research ethics commission/ethics review board or data protection officers.

The partners with institutional research ethics commissions will apply for ethical approval in September–October, 2021, to allow a few months (at least 2) for the revision of the data collection, processing, and storage plan, and to ensure the use of appropriate informed consent language and information about the research to the research participants. Adequate time will be needed to recruit YCS, carry out research (including ethics) training with the researchers and R-YCS, and start data collection in February 2022. Copies of requests and authorisations/approvals will be attached to the relevant deliverables.

The project SEB will assist the consortium in anticipating ethical and legal issues pertaining to CS research if needed. In addition, the project team will develop ethical guidelines for citizen scientists to prevent research misconduct as part of the conceptual framework of Y-CSS (D1.2). The project's ethical risks are addressed in D7.1, and their mitigation measures are discussed in D1.2.

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