D1.4 FINAL MODEL OF DIVERSITY
THE RESEARCH PROTOCOL OF THE DIVERSITY PILOT STUDY

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Abstract	This deliverable contains the final protocol that has been implemented by all the partners involved for the data collection for the evaluation of human diversity. We aimed at exploiting as much as possible the diversity of different countries and cultural communities among partners and, at the same time, maintaining a level of comparability. The latter point has been

	difficult as the conditions and related restrictions due to the pandemic affected the countries differently.
Keywords	Research protocol, diversity, pre-pilots, diversity pilot, design

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* R: Document, report (excluding the periodic and final reports)

DEM: Demonstrator, pilot, prototype, plan designs

DEC: Websites, patents filing, press & media actions, videos, etc.

OTHER: Software, technical diagram, etc.

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EXECUTIVE SUMMARY

This deliverable contains the final protocol that has been implemented by all the partners involved. We aimed at exploiting as much as possible the diversity of different countries and cultural communities among partners and, at the same time, maintaining a level of comparability. The latter point has been difficult as the conditions and related restrictions due to the pandemic affected the countries differently.

In the context of a global pandemic, the criterion of ecological validity became problematic as such exceptional circumstances made some of our initial design not feasible or valid anymore. The pandemic and the related restrictions created a very new and dynamic context. We responded changing several times our instruments adapting them to the context as much as possible. A context that was often different between the countries involved

This document is the necessary companion to the datasets that will be made available to the scientific community at large. The degree of complexity and difficulty designing this project's pre-pilots far surpasses what is typically considered standard in social science research. The main features of this data collection can be summarised in the following points:

1) It includes two forms of data collected: *self-reported* data employing a survey and *behavioural* ones, the latter collected by the iLog app.
2) It is a cross-cultural and multi-country data collection
3) It entailed a synchronic (survey) and diachronic (iLog App) data collection
4) It covers different aspects of student's social practices
5) It includes, for the iLog data collection, data from smartphone's sensors.

The challenge of tackling 'diversity' in an empirical study was to move from an abstract concept to an empirical one, a challenge known to social scientists. We have operationalised diversity within the context of social practices and found indicators to measure the latter among the three dimensions underlying social practices: competence, materiality and meaning. There are, of course, other possible empirical implementation of the concept of diversity, but we believe that our choice was the best option in the context of this project.

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ABBREVIATIONS

AAU   Aalborg University (DK)

JLU   Jilin University (CN)

LSE   London School of Economics (UK)

NUM   National University of Mongolia (MN)

UC   Universidad Católica "Nuestra Señora de la Asunción" (PY)

UNITN   University of Trento (IT)

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1. Introduction

The present deliverable presents the methodological aspects of task 1 of WP2; in other words, the empirical protocol developed for the data collection on diversity and social practices. This empirical data are to inform later tasks in the development of the WeNet platform. We faced the unique challenge of designing a protocol for field research during a global pandemic. The latter induced a frequent change of conditions that required adaptation an equally necessity of change from our side.

This deliverable contains the final protocol that has been implemented by all the partners involved. We aimed at exploiting as much as possible the diversity of different countries and cultural communities among partners and, at the same time, maintaining a level of comparability. The latter point has been difficult as the conditions and related restrictions due to the pandemic affected the countries differently.

This work is based on the previous theoretical and preliminary empirical evidenced related to the concept of Diversity (previously submitted in deliverable 1.1 and 1.2) and on the data minimisation principle (see deliverable 11.2).

This deliverable presents the entire research protocol of the diversity pre-pilot study carried out between September and December 2020.

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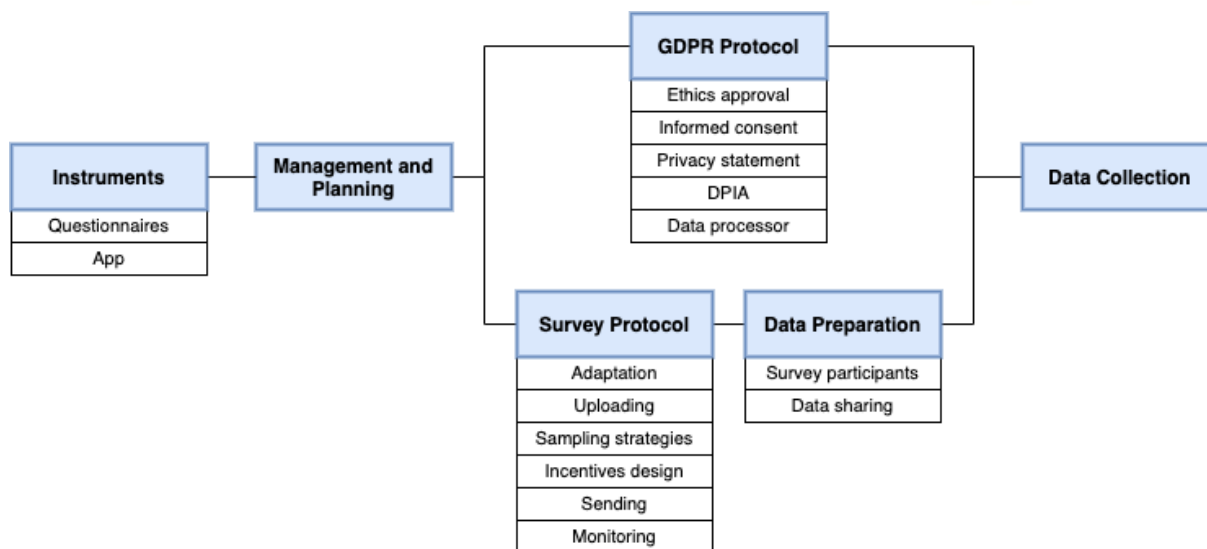
FIGURE 1 SURVEY DESIGN

Such a degree of sophistication does not mean that the pre-pilot did not have to face the challenging task of collecting data during the pandemic. As aforementioned, we adapted the design to the best of our abilities to the current situation. However, it is essential to remember that there is simply no precedent that could guide us from an ecological validity perspective.

In particular, our data collection objective was to gather information about social practices and a new and unforeseeable context in which these practices has been modified or adapted made our task particularly difficult. We had to revise our instruments to gather information about the least affected practices by the pandemic's new social context.

We believe that such a goal was achieved and in the next deliverable, we will present our analysis. In the meantime, we present in this document the detailed research protocol of the pre-pilot study.

The deliverable is organised as follow (see also fig.1): The second section describes the research definition;The third section describes the tools prepared for the data collection, namely questionnaires and app. The questionnaires were uploaded on LimeSurvey for online distribution, while the app is i-Log (cit.), an app for data collection installed on the participants' smartphone.

Thefourth section describes the timing and roles among and between WeNet partners to prepare and deploy the survey and survey data.

The fifth section describes the set of documents and procedures to prepare and run the survey, considering the GDPR compliance, the Survey protocol and the data preparation procedures.

The last section describes the data collection, within the actual timing for each survey site, a summary of the participants' responses and an overview of the participants' responses, and the sample decrease.

2. Research definition

As stated in the deliverable 1.2, diversity is a compositional construct that does not exist at the individual level of analysis. We have diversity only between individuals and not within individuals. This means that we can recognise diversity only when we compare two people and therefore, when we move at the level of group, organisation, community, society. Moreover, "being different" is a relational concept that applies to everyone, the majority as well as the minority (Tsui, Egan & O'Reilly III, 1991). In other words, there are two basic approaches to describing various aspects of the social world, according to their *attributes* or according to their *relationships* (Knoke & Kulinski, 1982). This has a direct effect on how we conceptualise diversity, how it can be exploited and how it can be used.

For one hand, attributes are intrinsic characteristics of people, objects, or events. When we think of explaining variance among such units of observation, we almost naturally resort to attribute measures, those qualities that inherently belong to a unit apart from its relations with other units or the *specific context* within which it is observed. This demographic perspective (Haveman and Wetts, 2019)— diversity is focusing on the distribution of individuals, groups, and organisations along salient dimensions of social structure, such as individuals age, race and gender, group size and composition, and organisational form and location— characterises internal organisational demography and organisational ecology.

From the other hand, relationships are actions or qualities that exist only if two or more entities (e.g., persons, objects, and events) are considered together. A relation is not an intrinsic characteristic of either party taken in isolation, but is an emergent property of the connection (e.g., a person's age, sex, intelligence, income, and the like remain unchanged whether at home, at work, at church), *relations are context specific* and alter or disappear upon an actor's removal from interaction with the relevant other parties (e.g., a student/teacher relation does not exist outside a school setting; a marital relation vanishes upon death or divorce of a spouse). The relational perspective broke with the assumption that individuals, groups, and organisations can be understood as atomistic actors. Instead, all social actors are just that—social—which requires recognising how *webs of social and economic interactions* create opportunities for and constraints on action. At the microlevel, relationships determine what actors can do and what actors are motivated to do because people and groups in organisations are interdependent (Haveman and Wetts, 2019).

Although attributes and relationships are often treated as antithetical and even irreconcilable (Knoke & Kulinski, 1982) some work combining the network and demographic perspectives brings to light network mechanisms for explaining how diversity affects group performance (Haveman and Wetts, 2019). In fact, not only the network mechanisms mediate the impact of diversity, but the network processes can be sources of (dis)advantage for different demographic groups, and demography can condition network processes (Haveman and Wetts, 2019).

While attributes are intrinsic characteristics of people, objects, or events, a relationship is the linkage between units of observation, be they objects, events, or people. Demographic characteristics are clearly an example where both direct attributes, such as individuals' gender or age, and relationship on an attribute between two or more

individuals, are important for understanding social interactions and outcomes. (Tsui, Egan, O'Reilly III, 1991, p.183). In other words, the concept of diversity more accurately represents the varied perspectives and approaches that members of different identity groups bring.

To organise thinking about different types of diversity, several researchers (Cummings, Zhou, & Oldham, 1993; Jackson, 1992; Jackson, May, & Whitney, 1995; Maznevski, 1994; Tsui, Egan, & O'Reilly III, 1992; Pelled, 1996; Harrison et al. 1998; Harrison et al. 2002) have suggested ways of categorising different types of diversity. One common distinction is between diversity on "observable" demographic characteristics or "readily detectable attributes" or "surface level diversity" such as sex, culture (race, ethnicity, national origin), age, membership in formal (religious or political) organisations, and physical features and diversity with respect to less "visible/observable" demographic characteristics or "underlying attributes" or "deep level diversity" such as education, technical abilities, functional background, tenure in the organisation, or socioeconomic background, personality characteristics, cultural, cognitive, or values.

TABLE 1 CHARACTERISTICS OF SURFACE AND DEEP – LEVEL DIVERSITY.

Surface Diversity	Deep Diversity
➢ Observable demographic characteristics ➢ Readily detectable attributes ➢ Surface-level diversity such as: race or ethnic background, age, gender, disabilities	➢ Less observable demographic characteristics ➢ Underlying attributes ➢ Deep-level diversity such as: education, technical abilities, functional background, tenure in the organization, or socioeconomic background, personality characteristics, cultural, cognitive, or values

Observables, readily detectable or surface attributes can be quickly and consensually determined with only brief exposure to a target person. Generally, they are immutable, almost immediately observable, and measurable in a simple and valid way (cf. Jackson et al., 1995; Milliken & Martins, 1996). Diversity at observable level can be defined as "differences among group members in overt, biological characteristics that are typically reflected in physical features." (Harrison et al, 1998, p.97).

Non-observables, underlying attributes or deep level diversity are more subject to construal and more mutable. Task-related underlying attributes include knowledge, skills, abilities (cognitive and physical), and experience. Relations-oriented underlying attributes include social status, attitudes, beliefs, values, personality characteristics, behavioural style, knowledge, skills, and extra-team social ties. Information about these factors is communicated through verbal and nonverbal behaviour patterns and

is only learned through extended, individualised interaction and information gathering. Jackson and colleagues noted that these aspects of individuals are more "subject to construal and more mutable" (Jackson et al., 1995; 217) than other aspects. To support this perspective, social psychological studies have reported that attitude similarity was one of the most important *predictors of attraction and friendship* (e.g., Antill, 1984; Byrne, 1971; McGrath, 1984; Newcomb, 1961). The similarity in attitudes can ease interpersonal interaction and increase rewards when relationships are viewed within an exchange theory framework (Thibaut & Kelley, 1959). Further, attitudinal similarity may facilitate communication; it may also reduce role conflict, because people have similar conceptualisations of their organisations and jobs, and it may reduce role ambiguity because of communication on the job increases (Tsui & O'Reilly, 1989)." In summary, knowledge of attitudes, beliefs, and the value of similarity between individuals forms the basis for continued attraction and affiliation. "Research generally supports the idea that initial categorisations are accompanied by perceptions of similarity or dissimilarity that are based on surface-level demographic data; these perceptions change when deep-level information is obtained." (Harrison et al., 1998, 98)

One reason for differentiating between observable and non-observable types of diversity is that when differences between people are visible, they are particularly likely to evoke responses due directly to *biases, prejudices, or stereotypes*. We should note, though, that these two types of diversity are not mutually exclusive. For example, ethnic differences may be associated with differences in underlying attributes (e.g., socioeconomic status, education, values), but this is not necessarily true. There are many ways in which groups can be diverse concerning underlying attributes or non-observable characteristics. One type of diversity on underlying attributes relates to differences in personality characteristics or values of a group's members. Although not readily observable, these differences can create major differences in orientations toward issues and preferred interaction styles.

A second reason is that the distinction between surface- and deep-level diversity plays an essential role in understanding diversity and its use. On the one hand, the distinction marks a boundary between observable attributes such as demographic characteristics (e.g., gender, age, ethnicity, etc.) or physical characteristics (e.g., skin colour, disability, etc.) and non-observable attributes. The latter, in turn, can be classified into (a) task-related underlying attributes that include knowledge, skills, abilities (cognitive and physical), and experience; and (b) relations-oriented underlying attributes that include social status, attitudes, values, personality characteristics, behavioural style, and extra-team social ties.

A third reason for the usefulness of distinguishing between these two types of diversity lies in the greater simplicity in the processes of operationalising the concept of diversity and consequently measuring it. As we will see in the next section, both surface diversity and deep diversity for many reasons fall into the broader area of social practices at the group level and behavioural routines at the individual level. In this perspective, materiality (the material objects possessed as a car or a membership), competences (the set of knowledge, skills, and abilities) and meaning (the set of values, attitudes, personality, etc.) concur to define on the one hand the specific abilities and competencies of the subject - his routines -, on the other hand, taken individually, this set of elements can be recombined by the subject to give rise to new and different

behavioural routines. Both, if recognised at the community level, become social practices.

In brief, WeNet's goal is to harness the diversity of the community to improve the "well-being" of its members. Diversity, as defined here, is complex and multi-layered, and it is a compositional construct that does not exist at the individual level of analysis, it does not exist within individuals but exists only between the social units of individuals (e.g., their social practice) when two or more individuals enter into interaction. Nevertheless, the individual level of analysis is included as an aspect of diversity because individual differences in various attributes, when present in a group, or organisation, create diversity. "That is, individual attributes reflect the content of diversity; by contrast, the configuration of attributes within a social unit reflects the structure of diversity." (Jackson, May and Whitney, 1995, p.217-218).

On the other hand, the distinction marks more clearly, which are the diversity that can be leveraged into the WeNet Project and the diversity that is not so useful. With a view to enabling a sociotechnical system that allows people to connect to achieve their daily life goals while respecting their differences and embodying fundamental characteristics of transparency, fairness and responsibility must respond to the needs expressed. To respond to the needs expressed, the only way is for the respondent to be competent in that field. Therefore, except in very rare cases, only the non-observable attributes that can help to identify who, more than others, has the best characteristics (competence) to respond to the needs expressed, and certainly not the socio-demographic characteristics. If I am looking for a good restaurant, I expect to be answered by someone who knows the area, loves good food and goes to restaurants, better if s/he shares my taste, no matter if it is a man or a woman or black or white.

And finally, only deep-level diversity can be treated as a resource and can therefore be leveraged for our goals. Indeed, non-observable diversity is an intangible resource, just as much as corporate image, trademarks and patents, and other intellectual property existing in the abstract.

In summary, as Figure 1 shows, diversity is a property of the system or aggregate, i.e., of the company, the team, the group, the community, the couple.
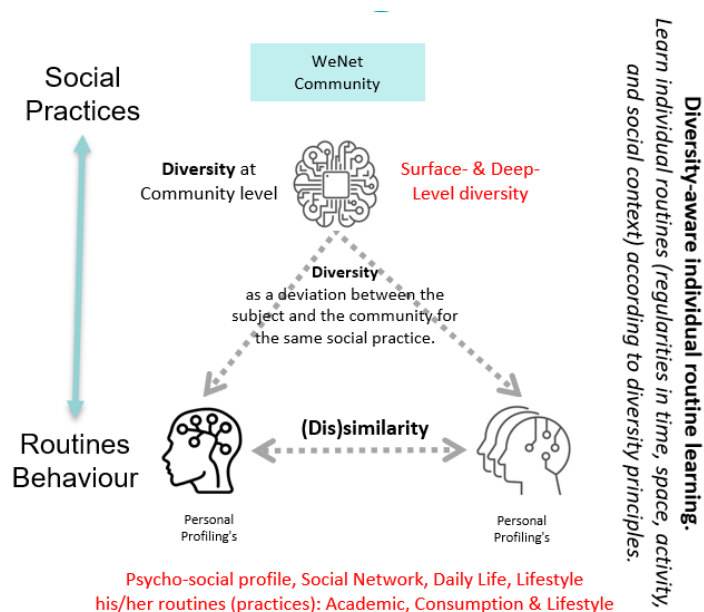
FIGURE 2 SUBJECTS – COMMUNITY INTERACTION LEVEL AND HOW DIVERSITY CHANGES AT DIFFERENT LEVEL OF INTERACTION.

On an individual level we can observe and collect information on the attributes of the subject. However, only when this information is compared with the attributes of other subjects and then we move on to the group level, we can begin to observe diversity, in terms of heterogeneity between groups of subjects. And at the end, in the backwards path from the top (the group) to the subject we can finally find that (dis)similarity between the subjects that we can use for our WeNet project.

2.1.   From Attribute to Holistic perspective.

Diversity is a complex, multi-layered compositional construct, the only way in order to capture and model diversity is to move from a representation of diversity as a constellation of individual social attributes to a holistic perspective. If we want to measure diversity, as defined above, we cannot simply collect a long list of attributes because the multi-layered compositional structure of diversity cannot be captured by a simple list of different characteristics. Knowing the single pieces, the attributes, may not be enough to capture the diversity. For example, knowing that a subject has a driving licence and (s)he owns a car gives us only one side of the coin and not the whole complexity of a driver.

In the same way, we need to recognise others an more complex diversity features at the individual level how the subject organises his/her life in time, every day, how the subject schedule his/her daily activities (e.g., waking up, having a shower, breakfast, taking the car-bus-train, going to work, beginning work, lunch, resuming work, coming back home, then housework and family/child care, relaxation, dinner, and at the end of the day, before they go to sleep, some leisure activity. These *behavioural routines* may change on weekdays and weekends or change according to external and contextual factors day by day. And moreover, how diversity is related to the way each of these activities is carried out. For example, eating or cooking changes according to the skills, tastes and preferences of the day, lifestyle, opportunities, etc. In turn, both these internal individual levels of diversity can be compared at the group level, giving

place to the next level of diversity depending on how groups of people organise their lives and how they perform each individual task.

In other words, the problem is how we can operationalise these different forms of diversity at different levels in a computational model, and first of all: how we can measure it? Our unit of observation is the individual, his/her social and demographic attributes, his/her behaviours, beliefs, abilities, etc., on the other hand, we can "observe" the variability only at group level among social units, understood both as surface and deep-level diversity. Moreover, we have diversity within the subject, when we compare his/her present with his/her past, how he/she behaves today compared to yesterday, or during the day, the week, etc., and at the same time, the same behaviour can be followed or not by the other subjects, generating a new level of diversity linked to the behaviour of groups of people. What appears, at first sight, is that we must manage different sources of diversity with different meanings at different levels. So, to capture and model diversity the only way is to move from a representation of diversity as a constellation of individual social units to a holistic perspective, where the person and not his individual attributes are treated as a whole. In other words, to move from a variable-centre to a person-centre approach. [for more details see the deliverable D1.1, §1.4]. Likewise, moving from a single list of attributes to attributes that are combined to form a configuration that is recognisable at the social level: social practice. Thus, moving from a perspective centred on the person and his or her behavioural habits to a perspective centred on the relationships between people within a group/system, the locus of diversity. In fact, people do not just perform single attributes, at most, they have attributes, what they perform are actions, activities and to do this they use their attributes, combining them with each other, as a means to perform them.

People, during their lives, continue to learn not only skills, abilities, knowledge, but above all they learn to adapt to the *social context* in which they live through a continuous process of socialisation. In other words, socialisation is the process whereby the helpless human infant gradually becomes a self-'aware, knowledgeable person, skilled in the ways of the culture into which he or she was born. During the course of socialisation, especially in the early years of life, children learn the ways of their elders, thereby perpetuating their values, norms and social practices. "As Connell has argued: 'Agencies of socialisation' cannot produce mechanical effects in a growing person. What they do is invite the child to participate in social practice on given terms. The invitation may be, and often is, coercive - accompanied by heavy pressure to accept and no mention of an alternative …" (Connell, 1987, cited in Giddens & Griffiths, 2006, p.460). In this process, subjects learn not only social practices, but also how to differentiate themselves with social practices.

Social practices are routine behaviour like going to work, cooking and showering, which integrates different kinds of elements, such as bodily activities, material artefacts, skills, and associated meaning. Holtz, Georg (2013). To grasp diversity, we need to shift the focus from groups to the actor's behaviour patterns (routines): in brief, their (social) practices.

A 'practice' (Praktik) is a routinised type of behaviour which consists of several elements, interconnected to one other: *forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge*. A practice – a way of

cooking, of consuming, of working, of investigating, of taking care of oneself or of others, etc. – forms so to speak a 'block' whose existence necessarily depends on the existence and specific interconnectedness of these elements, and which cannot be reduced to any one of these single elements. Likewise, a practice represents a pattern which can be filled out by a multitude of single and often unique actions reproducing the practice (a certain way of consuming goods can be filled out by plenty of actual acts of consumption). A practice is thus a *routinised way* in which bodies are moved, objects are handled, subjects are treated, things are described, and the world is understood.

Practice is a configuration of three components: material, meaning and competence. The elements are linked within but also across these components to form a 'block' of interconnected elements – the practice. (Shove and Pantzar 2005, Røpke 2009).
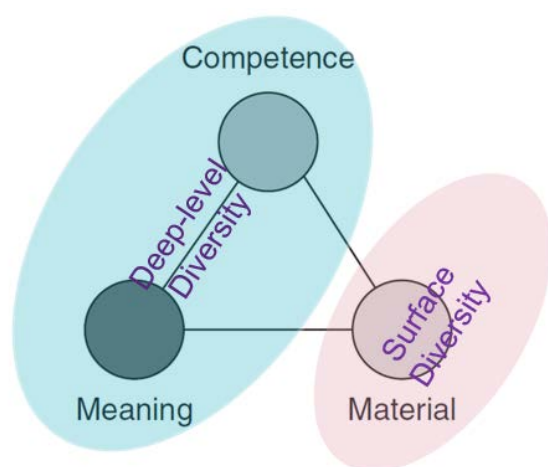
FIGURE 3 DIVERSITY INTO A SOCIAL PRACTICES' PERSPECTIVES.

- *Material* covers all physical aspects of the performance of practice, encompassing objects, infrastructures, tools, hardware including the human body. For example, this area includes characters as sex, race, ethnicity, national origin, age, membership in formal (religious or political) organisations, and physical features. In other words, most of the surface diversity.
- *Competence* incorporates skills, know-how, (background) knowledge as well as social and relational skill which are required to perform the practice. Competences are embodied in the individual and can neither (easily) be directly observed nor (easily) exchanged between individuals. Still, they are social in the sense that they are shared by many individuals and may also be reflected in the wider social structure. In addition, the competence may allow the subject to develop a new use of specific material, such as when someone decided to skateboard in the snow and invented the snowboard. This aspect falls under diversity at a deep level. However, some attributes interrelated with the material may also fall into this area. For example, national origins are part of the material, but they are also a proxy for knowledge of the country in which the subject was born (e.g., language, culture, etc.).
- Meaning incorporates the issues relevant to that material, i.e., the understandings, beliefs, value, norms, lifestyle, and emotions. As mental activities, emotion, and motivational knowledge into the one broad element of

'meaning', a term we use to represent the social and symbolic significance of participation at any one moment. The issues considered and the respective understandings, beliefs and emotions are socially shared and may be discussed and negotiated in the communication of individuals. Moreover, the same meaning may be shared and/or may relate groups of practices to each other. For example, environmental protection may imply practices such as the use of public transport, sorting rubbish, eating only certain types of products, etc. Also, this aspect falls under diversity at a deep level.

For example, in the medium of transportation, we have that:

Components of social practice	Description
material	covers all kind of activities such as going to the bus stop, buying a ticket, taking a seat, signalling the bus driver to stop, etc
competence	the bus user knows where the bus stop is, which ticket is cheapest, which bus number to take, and where to get off the bus.
meaning	Issues of relevance associated with the travel mode of going to work are for example: environmental effect, social status, and flexibility. Someone going by bus regularly may associate it with being cheap, having time for reading, or enjoying the company of others.

Table 1. *Components of social practices*

Therefore, shift the focus of diversity from subject attribute to social practices and then on the behavioural routine of the subject can allow moving into a holistic perspective for several reasons. The first, a practice is a combination of competence and meaning that match perfectly with the deep-level diversity. The second, there is a clear distinction between the practitioner (the subject) and the social practice (the community), and meanwhile, both are one and the same thing. Social practices exist independently of the practitioner, and they are codified at the social level. As Røpke (2009) stated, practice is a model of interconnected elements that are recognisable in time and space, while the practice is reproduced by individuals and new individuals are recruited into practice. The third, individuals are seen as "carriers of practices" and do not freely choose between practices based on utility or similar individualistic concepts but are "recruited" into practice based on their background and history (Reckwitz 2002). Somehow the distribution of some practices in the population follows the level of inequality of the social system. Of course, this diversity may be ethical or unethical, acceptable for one specific culture but not for another, but this is about the incidence of a practice in a population and how much this is related to surface diversity. The fourth, over time, the individual and the community can increase their diversity. The individual's involvement in some practice for a certain amount of time leaves traces in the individual, such as acquired knowledge and skills and the accumulation of material artefacts. These "sediments" make it easier and more likely to become involved in some practices but not in others, i.e., the involvement in practices is path-dependent (Røpke, 2009). The fifth, diversity is socially recognised, and practices are social because they are similar for different people at different times and in different places. (Reckwitz, 2002). The sixth, for the same configuration of deep-level diversity we expect to observe the same regularity at each interaction. Social practices therefore refer to regularity - models of how certain daily practices are typically and habitually performed in (a considerable part) of a society. Holtz, Georg (2013).

Diversity in a social practice perspective can allow us four main improvements. The first is that the clear distinction between social practice at the community level and the human behaviour routine at the individual level allows us to relate the meso-level (the community/team etc.) with the micro level (the individuals). The second, considering diversity not only in a specific observable or non-observable attribute, but as a combination of materiality, competence and meaning, allows us to expand the construct of diversity from a variable-centred perspective into a person-centred perspective and thus into a holistic view. Third, social practice, precisely because it is independent of individual practitioners, and therefore is similar for different people in different times and places, allows one to compare the same practitioners over time or different practitioners in the same historical period. In other words, it allows to compare, on a common basis, different levels of diversity of the same social practice between different cultures/countries/generations or in different historical periods. Four, diversity, in this new scenario, is no longer based on a classical standard stereotype of perception based on superficial attributes such as gender, race, age, etc. nor is it based only on specific deep-level attributes such as knowledge, skills, etc. but through a more complex and multi-layered definition of diversity based on social practice.
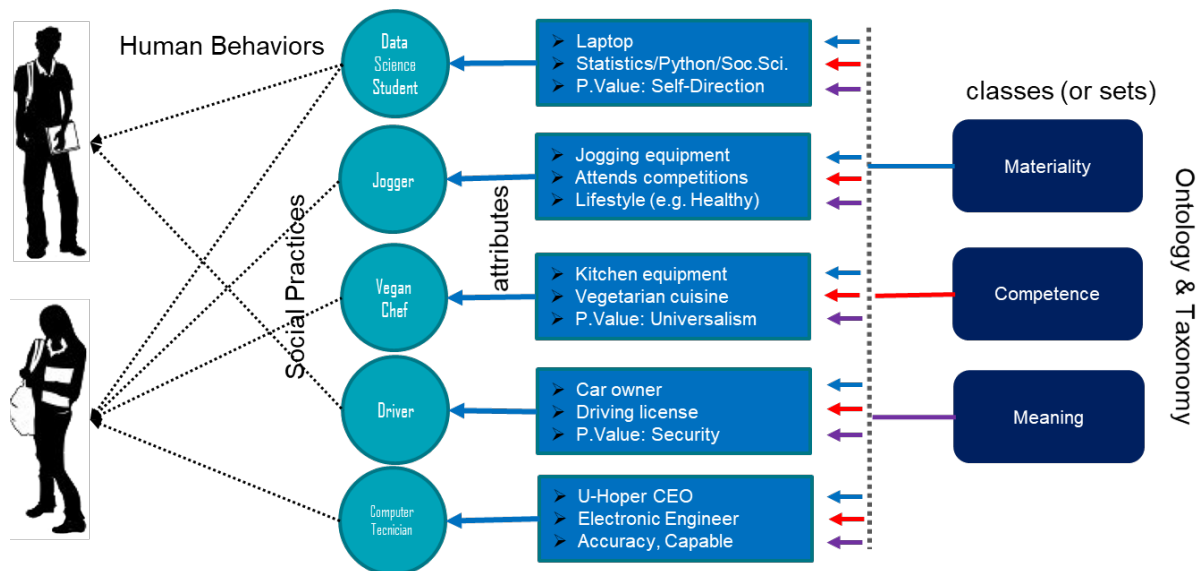
FIGURE 4 DIVERSITY AMONG TWO SUBJECTS BASE ON SOCIAL PRACTICES COMPONENTS.

As can be seen in Figure 3, where the diversity/similarity of the two subjects is given in terms of different routine behaviours (social practice), rather than by gender. In this example the two subjects share (are similar) because they both attend a data science course, and they are different because, he is a driver, and she is a jogger, a vegan chef, and an IT technician.
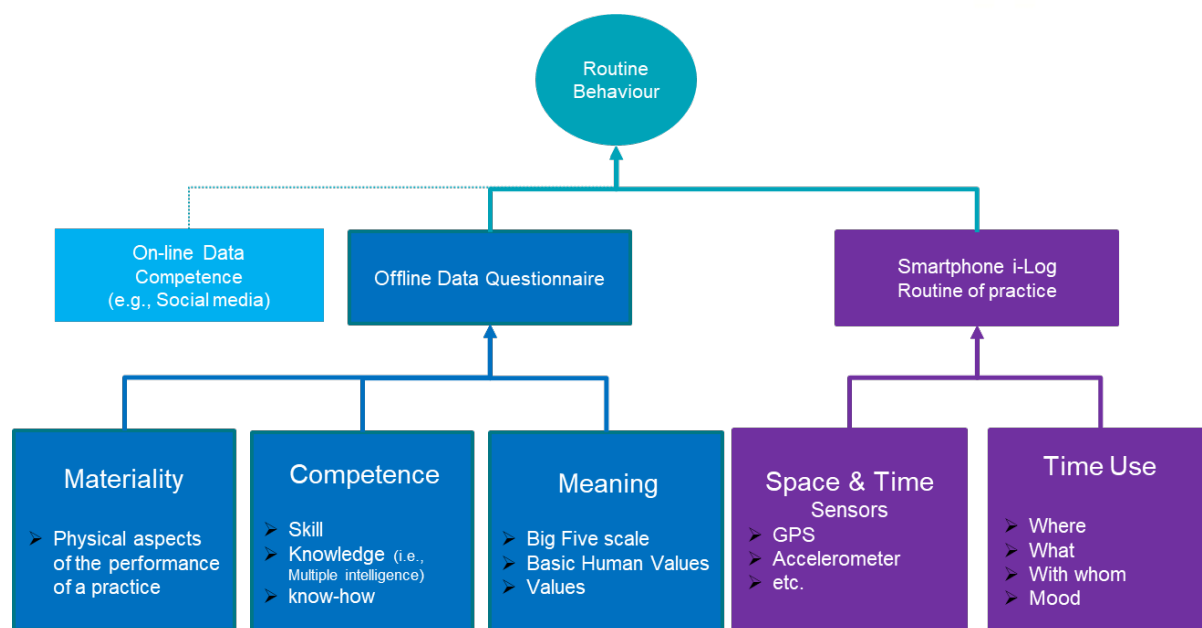
FIGURE 5 GENERIC STRUCTURE OF DATA COLLECTION OF DIVERSITY BASE ON SOCIAL PRACTICES. A SYNCHRONIC AND DIACHRONIC APPROACH.

The fifth major improvement in shaping diversity as a social practice is precisely when our goal is to take advantage of someone's diversity to meet the needs of those who require it. The first is to leverage the real expertise of the potential helper, based on a wide and precise set of information to find the best match. The second is to leverage only deep level diversity while minimising the risk of surface diversity entering the selection process. This reduces all ethical implications. In the example in figure 3, if we need to repair a computer, it is better to ask her and not him. And finally, the six, the approach of social practice gives us the possibility to develop both a method of data collection and a new way of analysing data in a relational perspective.

Due to the general definition of diversity as a relational process involving two different levels of diversity (surface and deep) on the one hand, and on the other hand, the idea that in order to capture diversity we have to move in the person-centred perspective and thus in the social practice/routine behaviour gives us the possibility to develop a process of operationalising diversity as follows:

- According to the social practice approach, diversity is a composition of three different aspects (material, competence and meaning).
- Only material and competence are directly observable, whereas meaning is a latent trait.
- Competence and meaning often cannot be reduced to a single attribute, but both are often multidimensional.
- Material, competence, and meaning are not mutually exclusive, but can be combined to achieve different social practices and routine behaviours. In turn, each social practice is composed of a limited and mutually exclusive number of materials, competences and meaning.
- Material, competence, and meaning change over time with their own timing. They can be acquired and lost over time.

- At the individual level, routine behaviours are performed over time and can change over time in terms of frequency, duration, and day of the week. Moreover, every day, subjects perform more different practices not only according to the time of day, but also according to their own lifestyle and personal habits.

According to what has been said above, in order to measure diversity, we need to design not only instruments that capture these three dimensions of diversity, but also to design a data collection that takes into account the different timeframes that are implied in the execution of these practices. For the former, the measurement instruments (the questionnaire and the time diary) must be developed according to the three dimensions, considering the different timing of each attribute investigated. Thus, a standard closed-ended questionnaire can be developed to detect static or slow-changing attributes over time, while for fast-changing attributes, or better to capture the routines' behaviour, a time diary tool needs to be developed, better in combination with passive streaming sensor data.

As Figure 4 shows, we need to develop also a two-stage data collection. The first, mainly synchronous, usually through a standard closed-ended questionnaire. With this method we can collect self-reported general data on materiality, competence and meaning at individual level related to several main area of interest for the research (e.g., sociodemographic characteristics, things owned – e.g., car owned, personal computer, etc. –, psycho-social traits – personality traits, value, multiple intelligence – social relation, cultural consumption, social media, eat and food, etc.). [1] The second, diachronic, using streaming data and a Time Diary, allows us to observe the subject's daily routine. In other words, in this second stage, we follow the subjects over time for several weeks, 24 hours a day, and collect data at a certain interval. Streaming data is collected with a frequency of up to one minute, while the Time Diary, which collects self-reported data, with a frequency of up to 30 minutes.

To enable this type of data collection at a high level of granularity, we exploit the potential of the smartphone and the i-Log app developed by the University of Trento. i-Log (Zeni et al. 2014, Giunchiglia et al. 2017; Giunchiglia et al. 2018) is a system used to carry out data collection campaigns with the ultimate goal of studying different aspects of human behaviour related to the use of time. The system is composed of (1) a backend infrastructure deployed in cloud, designed to handle huge number of users and workloads. It is responsible for collecting, processing, storing, and making the collected data available for further analysis. The second component is (2) a mobile application that runs on the users' personal mobile devices. Participants received a notification on their smartphone with four questions and prompted to fill out information about: (a) their activity "What are you doing?"; (b) the current location "Where are you?"; (c) the persons being with the participants at the time of the question "Who is with you?"; and (d) their mood "What is your mood?". Moreover, i-Log allow to collect a wide set of smartphone sensors. In i-Log, we can distinguish between two types of sensors, *hardware,* and *software*. The former refers to those physically embedded in

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[1] This information, in turn, is added to the information of other subjects to compose the diversity archive at the community level. This data on an individual level can be increased in the future with data from activities on the internet, social media, etc. and also in the respondent's WeNet community. This additional information will help to improve the profile of the respondent, especially in the area of competences.

the device, like the accelerometer, the gyroscope, and the GPS, among others. The latter instead refers to software components generate measurable features, such as an event when a new notification pops-up, or when the device connects to a Wi-Fi network. In i-Log the sensor data collection process can be configured based on the needs of each pilot study. What can be configured are the sensors to collect data from and at which frequency to collect data from them, i.e., it can be decided to collect data from the accelerometer at a pace of 60 values per second, while not collecting from the gyroscope at all.

By combining diachronic and synchronic data at individual level, we can observe the subject's practice in terms of behavioural routine and compare his routine with that of other subjects with the same practice. The use of both these sources of information can allow us to increase the reliability of how much a declared practice is actually carried out. In fact, we can distinguish between declarative knowledge (knowing what) (e.g., the best shop to buy coffee is the 'TripleStar' shop), and procedural knowledge (knowing how) that involves implicit learning (e.g., weekly trips to the 'TripleStar' shop to buy coffee). This becomes very relevant when our goal is to connect people who are really able to solve the needs of others.

3. Tools and measurement

As mentioned above for the survey data collection process, we developed several measurement tools: synchronic (closed-ended questionnaire) and diachronic (time diary and streaming data from smartphones). In this section, we describe their structure.

3.1. The synchronic measurements instruments (The questionnaire)

Diversity is a complex, multidimensional and multi-layered phenomenon. In other words, it is a latent concept that cannot be captured as a whole with a single measuring instrument but requires to be dissected into elementary parts that can be measured and reconstructed as a combination of its observed elemental parts.
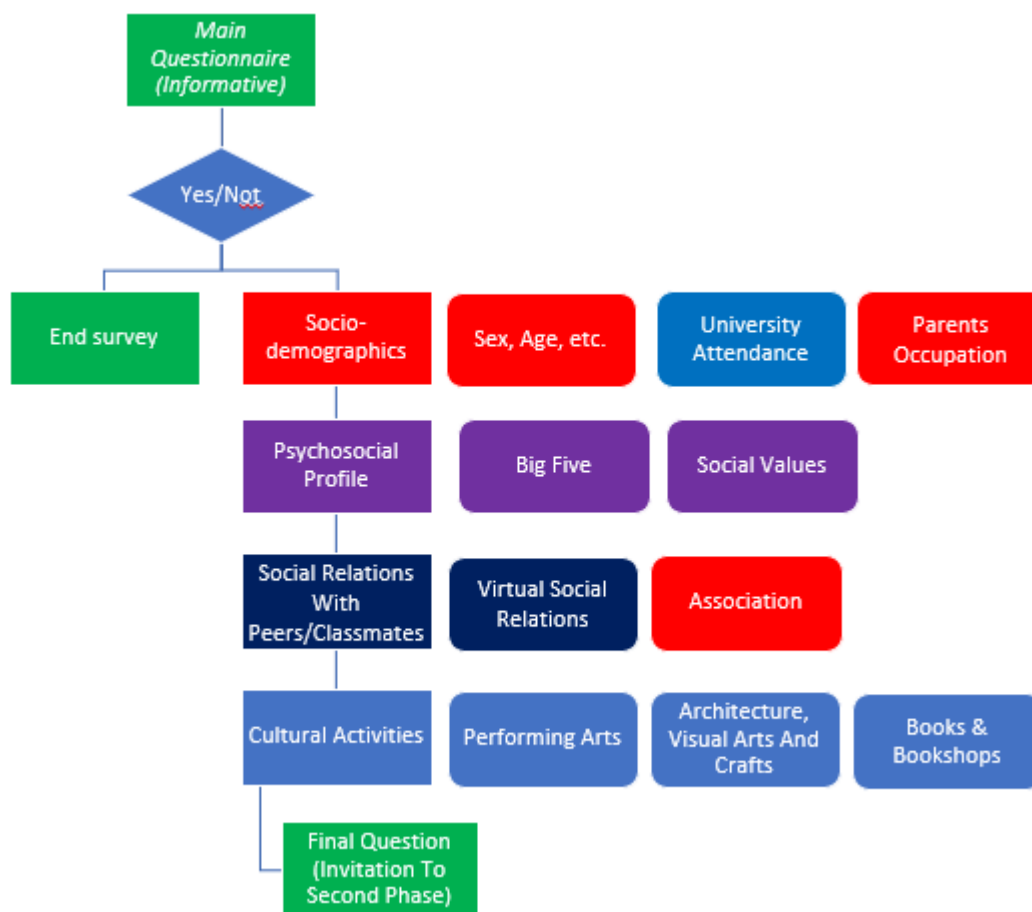
FIGURE 6 STRUCTURE OF THE QUESTIONNAIRE (MAIN) ADMINISTERED TO THE WHOLE POPULATION.
LEGEND: (RED) MATERIAL COMPONENTS; (PURPLE) MEANING COMPONENTS; (BLUE) COMPETENCE COMPONENTS; (GREEN) OTHERS INFORMATION'S.

In this first attempt to develop tools for observing diversity, we decide to focus on only a few specific subsets of diversity areas. Furthermore, in order to increase the amount of information collected and reduce the burden on respondents, the entire questionnaire was divided into three sub-questionnaires. The former (figure 5) was administered to the whole population with the aim of collecting a broad general set of

information related mainly to superficial diversity and, secondly, to cultural consumption and leisure (deep diversity), and, finally, to some dimensions pertaining to social relations (virtual and real). The second (figure 6) and third parts were administered only to i-Log participants and mainly devoted to finding deep diversity information. The second is mainly focused on exploring specific social practices, such as moving, cooking and shopping, and physical activities. The third (figure 7), explores the user's experience with the app and testing a multiple intelligence scale. Moreover, according to the social practice approach, all three the questionnaire gathered information related to material, competence, and meaning.
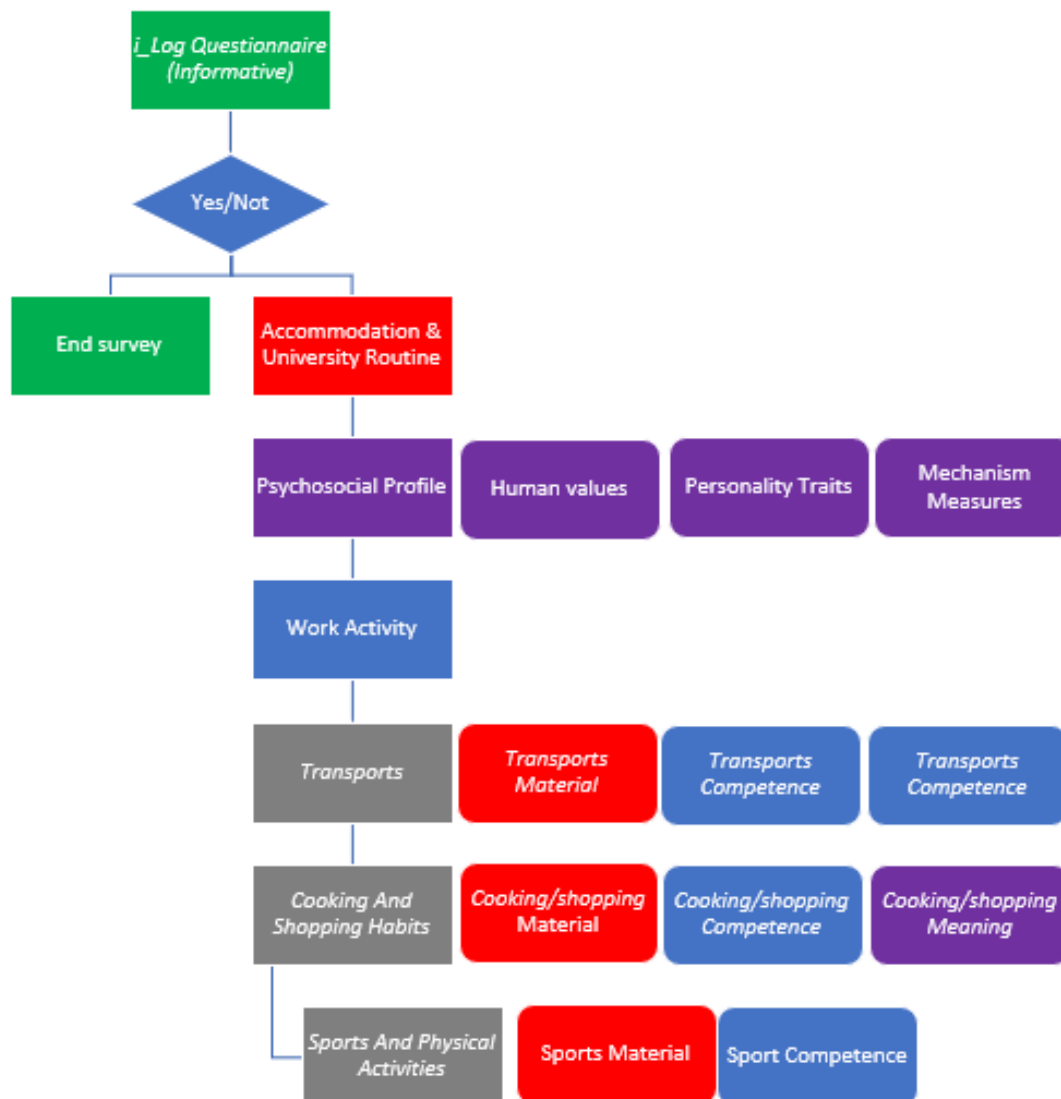
FIGURE 7 STRUCTURE OF THE QUESTIONNAIRE (I-LOG.1) ADMINISTERED TO ONLY THE I-LOG PARTICIPANTS.
LEGEND: (RED) MATERIAL COMPONENTS; (PURPLE) MEANING COMPONENTS; (BLUE) COMPETENCE COMPONENTS; (GREEN) OTHERS INFORMATION'S; (GREY) SOCIAL PRACTICE

The structure of the questionnaires and their content are self-evident. Each question and scale can be used as a single elementary piece of information on specific diversity characteristics. Their combination, in turn, can be used as a complex measure of diversity on specific social practices. Their use and the first empirical evidence will be the content of deliverable 1.3.

However, in the following, we will devote a few words to the questions we have decided to use to measure the meaning of social practices. However, these instruments can be used on their own to measure specific characteristics of diversity not directly related to particular social practices, but as a comparison between specific groups of subjects.

In the diversity pilot, we focused on five different scale for measure meaning: two scales for measure personality traits – Big Five (Donnellan, M. B., et al. (2006), and in a Jungian perspective (Jung, C. G. (1971); Briggs Myers, I. (1980, 1995); Mascarenas DDL, 2016; Wilde, D.J. (2009, 2011); Ewa Andrejczuk (2020) –; two scale to measure to measure human values (Schwartz 1994, Schwartz et al., 2001 & Valdiney V.G., 2014). Moreover, we use a multiple intelligence scale (Tirri, Nokelainen, 2008) as proxy to measure general competence of the subjects to use in addition with the specific competence gathered with other specific questions in the questionnaires.

In a few words, the first four scales have been chosen to map, from a different perspective, the meaning acting on daily routine behaviour and defining attitudes in general. I stress that the study of diversity is primarily an enquiry to test and develop instruments to capture diversity. The decision to use similar tools is justified because we do not know whether these tools can be discriminating or work properly with an electronic administration such as the one envisaged in the survey.
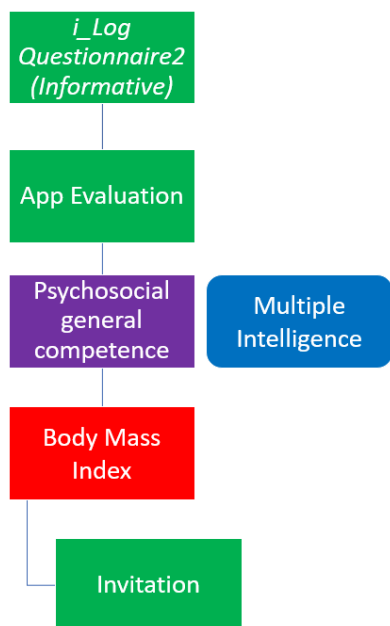
FIGURE 8 STRUCTURE OF THE QUESTIONNAIRE (I-LOG.2) ADMINISTERED TO ONLY THE I-LOG PARTICIPANTS.
LEGEND: (RED) MATERIAL COMPONENTS; (PURPLE) MEANING COMPONENTS; (BLUE) COMPETENCE COMPONENTS; (GREEN) OTHERS INFORMATION'S; (GREY) SOCIAL PRACTICE

The last scale, multiple intelligence, instead of being considered an additional personality trait, is considered a proxy for the subjects' actual or potential abilities. Moreover, this scale is used primarily to test it in its electronic form of administration, and secondly to observe the degree of correlation with individual specific skills of the subjects.

3.2. The diachronic measurements instruments (the time diary and the sensor data)

Time Use Surveys (TUS) aims to measure time use by individuals and households. In more detail, TUS measure the frequency and duration of human activities, offering a detailed view of society's social behaviour. In this scenario, the time diary diachronic research method and tool to gather data about user behaviours, activities, and experiences. Since the diary studies are recorded sequentially over time, it can be used to investigate time-based phenomena, temporal dynamics, and fluctuating phenomena such as moods. In a diary study, data is self-reported by participants longitudinally underlying activity sequences in time episodes that can range from a few days to even a month or longer (in our case up to one month) with a regular time interval (in our case half an hour for the first two weeks and one hour for the second two weeks). In other words, such type of data is usually collected by a self-completed time-diary that allows registering, at fixed time intervals, the sequence of an individual's activities. For each main activity in each interval, additional information is usually recorded, like information about "where" and "with whom" this activity was done.

In the diversity pilot, we develop two different time diaries with different timings and different objectives. The first one collects information about the beginning and the end of the day. At the beginning of the day (at 08:00), the subject must answer two qualitative questions. The first one asks about the quality of sleep "How would you rate your sleep quality last night?" and the second one asks how the subject expects the day to be "How do you expect your day to be?". Both are measured with a five-point scale.

At the end of the day (at 10pm) we ask subjects a general question about how the day was "How was your day?", plus a series of specific questions related to whether they had a problem at college/university "Did you have any problem at [college (weekdays)] today?", what and how did they solve the problem "What was the problem you had?", "Where you able to solve the problem (alone or with help of someone)?", and what was the effect of COVID-19 in limiting their life that day "Is there anything that you would have liked to do today that was not possible because of the Covid-19 virus?".

The second is a standard time diary with special sections on three main activities. Every half hour for the first two weeks and every hour for the second two weeks participants received a notification on their smartphone with four questions and were asked to fill in the following information:

- their activity "What are you doing?" with 34 answer categories such as sleeping, eating, working, etc.,
- the current location "Where are you?" with 26 categories such as home, workplace, university, restaurant, etc.,
- the persons being with the participants at the time of the question "Who is with you?" with 8 categories such as nobody, partner, friends, etc,
- and their mood "What is your mood?".

When the subject states that (s)he has or was "eating", "travelling" and "doing sport", (s)he is invited to answer some additional questions. Specifically:

- When (s)he eats they must report what main foods and drinks they ate with 20 categories such as rice, potatoes, meat, beer, etc.
- When (s)he is doing sport, they have to state the type of sport with 9 categories such as jogging and running: water sports, etc.
- When (s)he travels they have to state (a) the reason for the travel with 7 categories such as study, social life, etc. and (b) the means of transport with 16 categories such as car, bus, etc.

Moreover, at 10:00; 12:00; 15:00; 17:00; 19:00; 22:00; 24:00; 02:00; 04:00; 06:00 the subjects receive one additional question in addition to the four it regularly receives. This question asking the subject if they had eaten in the las two hour and what they ate or drink ate with 26 categories such as rice, potatoes, meat, beer, crackers/biscuits, etc.

Simultaneously, the i_Log app collects in the background information from the following 32 *hardware* (e.g., accelerometer, gyroscope, GPS, etc.) and *software* (e.g., when a new notification pops-up, or when the device connects to a Wi-Fi network, etc.) sensors, plus 3 related to the time diary, during the day.

TABLE 2 LIST OF I-LOG SENSORS

id	Sensor	Estimated Frequency
1	Accelerometer	up to 20 times per second
2	Linear Acceleration	up to 20 times per second
3	Gyroscope	up to 20 times per second
4	Gravity	up to 20 times per second
5	Rotation Vector	up to 20 times per second
6	Magnetic Field	up to 20 times per second
7	Orientation	up to 20 times per second
8	Ambient Temperature	up to 20 times per second
9	Pressure	up to 20 times per second
10	Relative Humidity	up to 20 times per second
11	Proximity	up to 20 times per second
12	Location	Once every minute
13	WIFI Network Connected to	On change
14	WIFI Networks Available	Once every minute
15	Bluetooth Devices	Once every minute
16	Bluetooth LE (Low Energy) Devices	Once every minute
17	Running Applications	Once every 5 seconds
18	Screen Status [ON/OFF]	On change
19	Airplane Mode [ON/OFF]	On change
20	Battery Charge [ON/OFF]	On change
21	Battery Level	On change
22	Doze Mode [ON/OFF]	On change
23	Headset Status [ON/OFF]	On change
24	Ring mode [Silent/Normal]	On change
25	Music Playback (no track information)	On change
26	Notifications received	On change
27	Touch event	On change
28	Cellular network info	Once every minute
29	Movement Activity	Once every 30 seconds
30	Step Counter	up to 20 times per second
31	Step Detection	On change
32	Light	up to 20 times per second

33	Time Diaries answers	On change
34	Time Diaries confirmation	On change
35	Time Diaries questions	On change

All data are generated as time-series, consisting of a tuple composed of a timestamp and one or more values on a technical level. As briefly mentioned above, the smartphone generates and stores data locally before synchronising it with the backend server for permanent storage. The device stores time-series tuples in a buffer in memory and as soon as the buffer is full, it is unloaded in a compressed and encrypted file on the device local storage, inside the application sandbox that prevents other applications from assessing them. On average, we expect a modern smartphone to generate 500MB per day of uncompressed data. A data collection with 500 participants would generate around 7.5TB, without redundancies and backups, in one month.

4. Management Planning

The entire research project lasted 9 months, from the preparation of the legal documents to the definition of the research, the preparation of the tools and implementation of the data collection (see fig. 2). This section will describe the roles played by the various partners, while the detailed procedures will be described in detail in the following sections.
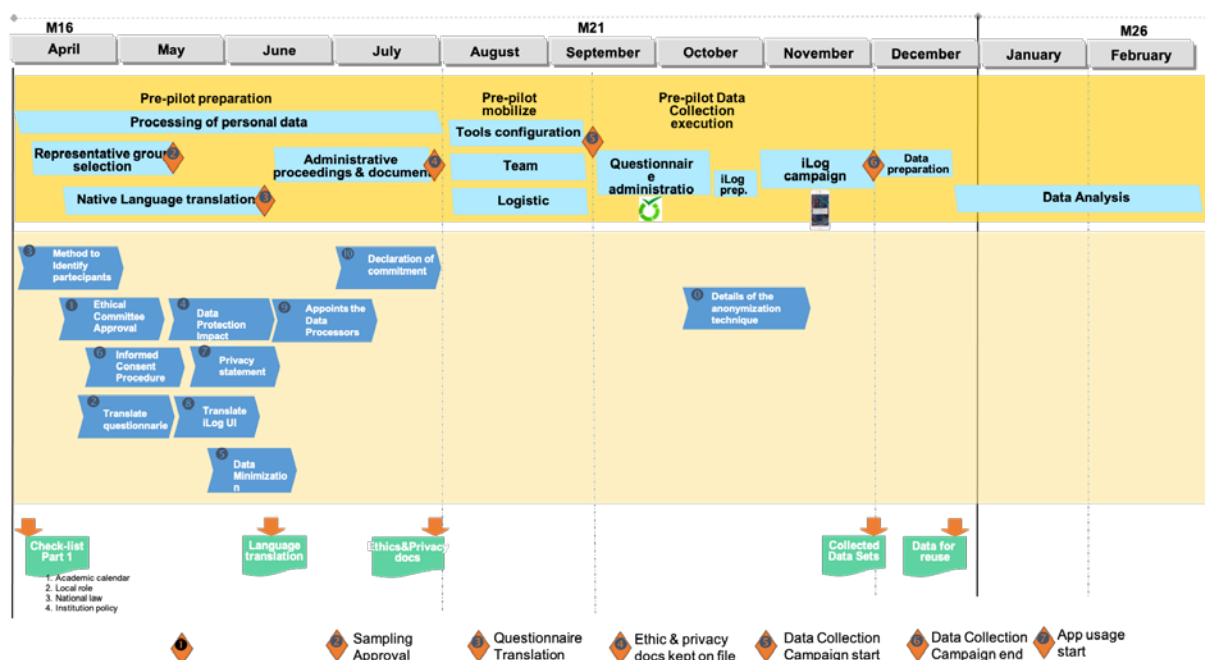
FIGURE 9 HIGH LEVEL ACTIVITY DIAGRAM

4.1. Timing and Roles

At a high level, the coordination of the activity and the preparation of the tools for the data collection was conducted by WP1, headed by UNITN. The adaptation and administration of the survey (see section 6. Survey protocol) were conducted by the partners.

Regarding the legal aspects, each partner has appointed a Data controller (article 4 of the GDPR), the natural person who individually or in collaboration with other subjects determines the purposes and means of the processing of personal data: he is the Data Controller. This was appointed to appoint two types of Data Processors, one internal and two externals, directly charged with managing data and risk (see section 5. on ethics and privacy compliance).

The internal data processor was in charge of managing and preparing the data during the survey.

The two external data processors are respectively UHopper (WP6) in charge of procuring the cloud and the LimeSurvey platform, on which the survey was conducted with online questionnaires; and UNITN (WP1) as a supplier and manager of the tools for the survey, namely the online questionnaires and the i-Log app.

Concerning the management aspects, each partner defined three different roles:

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1. Research leader: The research leader's role is to oversee the project's life cycle, focusing on the research design and management.
2. Survey leader: The survey leader's role is to oversee the survey especially with respect to the sample and personnel design, which also includes designing incentives and recruitment strategies, while also ensuring the overall compliance of the survey with privacy and ethical regulations. Furthermore, it also manages the actual running of the survey.
3. Technology leader: The technology leader's role is to oversee the platform's technological development by tightly collaborating with the survey leader to meet the requirements of the survey, especially concerning the i-Log app configuration and the helpdesk.

4.2. Services Support

This section defines the support of services provider. This means the UNITN will act as the service provider and provide paid services in each phase during the survey. During the survey, UNITN provides 3 main services:

1. **Survey Design Support:** In this part, the UNITN provides survey design template to help service customers to generalise the process of design survey in Phase 1. The template has defined the steps that are required to design and manage an interdisciplinary survey that involves collecting data from participants.
2. **Management Support:** In this part, the UNITN provides the management outsourcing service in Phase 1. This includes defining the suitable schedule (i.e. Gantt), listing the requirements of each role, guiding defining feasible outcome such as deliverables, milestones and so on.
3. **Technical Support:** In this part, the UNITN provides technical support in Phase 1 on data generation. This means the UNITN will provide the data collection tool i-Log, platform, servers and cloud deployment guide and bug fixing service according to the data requirements of service customers.

5. Ethics and Privacy Compliance

The section is based on the definitions and guidelines present in the deliverables D11.2 on the principles of data minimisation, privacy and security adopted by the WeNet consortium; and on D10.2, namely the project data management plan. From these derive the procedures and documents related to ethics and GDPR compliance, which will be described in the section. From an ethical point of view, this means preparing the documents to be submitted to the institutional review board (IRB) of the institution where the survey takes place, whose purpose is to assure that appropriate steps are taken to protect the rights and welfare of humans participating as subjects in a research study, and the procedures required by the IRB to comply with their regulations.

From a legal point of view, this means preparing the documents to be submitted in compliance with the regulation in the country where the survey takes place, e.g., the GDPR (General Data Protection Regulation) in Europe, and the procedures required to be compliant with it, e.g., preparing the informed consent to be presented to the participants.

The different templates and procedures defined both as support material for the other partners and minimum requirements for the project audit will be presented below.

The following figure 3 shows the WeNet Ethics Operation Steps Conceptual Model. Note that following diagram is not a flowchart, which means that some of the steps in it may start and be carried out in parallel before the end of the previous step.
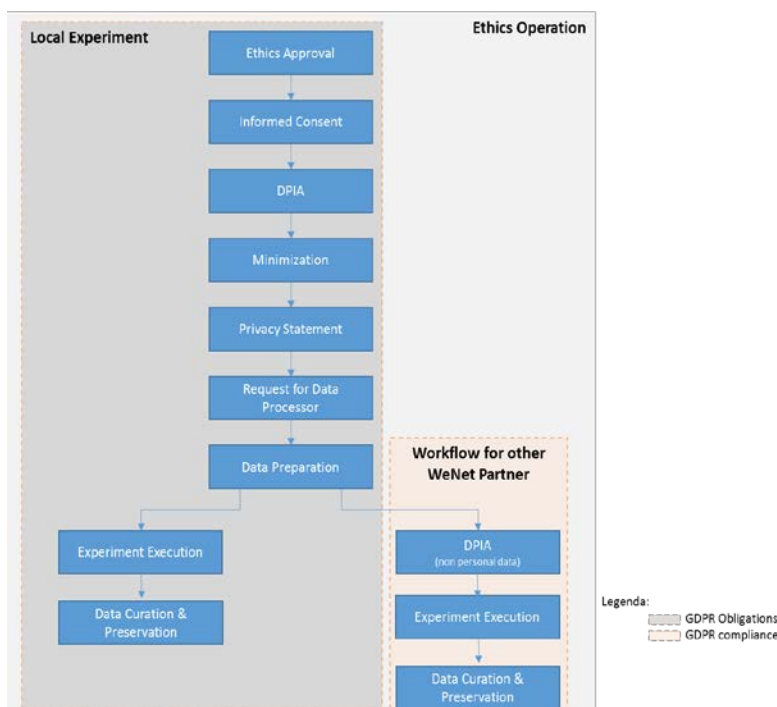

FIGURE 10 WENET ETHICS OPERATION STEPS CONCEPTUAL MODEL

Each part of the figure 3 is described in the following sections. Part of the documentation compiled by the partners is present in the deliverable D11.1.

5.1.   Ethics committee approval

This section describes the steps and requirements involved in getting the Ethics Committee approval.

- **Scope**: This step applies to any trial, pilot, survey or study for all partners of Wenet project.

- **Responsibilities**: The coordinator of the research project and/or pilot trial must submit the request for review to the identified ethics committee and get its approval. In the absence of the Ethics Committee figure at the University, the Data Controller must identify the alternative suitable figures to perform this task.

- **Procedure**:
  - Identify the relevant Ethics Committee to which submit the request of approval
  - Compile and submit to the Ethics Committee the "template to request the approval of a research protocol" and all relevant documents. In case the request needs to be made in a non-English local language, an English version of the request must also be prepared and stored as part of the documentation of this process.
  - Obtain the approval from the Ethics Committee in written form. Otherwise, if more changes are needed, a revised submission is prepared and submitted.

- **Templates and support material**:
  - The Application form for the Ethical committee "WeNet_Ethical-Committee-Application-form-template_V0.1_draft.doc"
  https://drive.google.com/open?id=1UsHJVydMpd34jEBYYjrESOIndI4t7XOR

- **Mandatory outcomes**:
  - Ethical committee request (English version)
  - Ethical Committee approval

- **Additional outcome requirements**
  - The naming conventions for outcomes, according to section 4.2.1 of the project handbook, must be followed.
  - The final version of the outcome documents must be uploaded in the storage folder[2] for the survey in the WP8 "Data Infrastructure" top-level folder. Each trial/pilot must create a subfolder specific to it and put these documents inside.

5.2.   Data Protection Impact Assessment

A Data Protection Impact Assessment (DPIA) is a document that helps the WeNet project assess, identify and minimise risks that may result from data processing.

- **Scope**: DPIAs are necessary whenever a data controller plans to collect or process data from any trial, pilot, survey or study within WeNet project.

- **Responsibilities**: data controllers are responsible for ensuring the DPIA is carried out for each processing operation of personal data. Additionally, all the other partners responsible for data processing should also conduct a DPIA (see section 6 "DPIA for Data Processor" for more information on this case).

- **Procedure**:
  - Identify the institution's DPO[3] (Data Protection Officer) or equivalent figure that will eventually assist in the compilation of the DPIA
  - Compile the DPIA using the WeNet template

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[2] For how to name the folder, please have a look at the D10.1 Project Handbook

[3] For Organization that must appoint a DPO under GDPR. The appointment of a DPO (Data Protection Office) under GDPR is mandatory for European public organization

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- (Optional) Submit to DPO the DPIA and all relevant documents. In case the request needs to be made in a non-English local language, an English version of the request must also be prepared and stored as part of the documentation of this process.
- (Optional) Obtain the review from the DPO and implement any comments into a finalised version of the DPIA document
- **Templates and support material**:
  - DPIA template "WeNet_DPIA-template_v0.1_draft.ppt" https://drive.google.com/open?id=1hE0aggtyrq-UDmjP1BZl5EAszg7VifrV
- **Mandatory outcomes**:
  - Finalized compiled DPIA document
- **Additional outcome requirements**
  - The naming conventions for outcomes, according to section 4.2.1 of the project handbook, must be followed.

The final version of the outcome documents must be uploaded in the storage folder[4] for the survey in the WP8 "Data Infrastructure" top-level folder. Each trial/pilot must create a subfolder specific to it and put these documents inside.

5.3. DPIA for Data Processors

One of the best ways to mitigate the ethical concerns arising from the use of personal data is to anonymise it so that it no longer relates to identifiable persons. Data that no longer relates to identifiable persons, such as aggregated and statistical data, or data that has been otherwise rendered anonymous (the data subject cannot be re-identified), are not personal data and are therefore outside the scope of data protection law (GDPR).

However, even if a partner uses only anonymised datasets, the partner must specify the source of the datasets he intends to use in its research by the preparing a DPIA document. In this case the partner will complete only part 1 of the template by answering "no" to all the questions to justify the decision of not to carrying out a full DPIA (answering yes to one or more questions is an indication that a full DPIA is necessary).

- **Scope**: DPIAs are necessary whenever a partner plans process data from any trial, pilot, survey or study within WeNet project.

- **Responsibilities**: the partner is responsible for ensuring the DPIA is carried out for each processing operation of personal data (anonymised, pseudo-anonymised, …).

- **Procedure**:
  - Compile the PART 1 of DPIA using the WeNet template
  - If after completing the screening questions in PART 1 you decided a full DPIA is not necessary, maintain a record of answers to the screening questions in the project repository
  - If after completing the screening questions in PART 1 you decided a full DPIA is necessarily follow the procedure in section 5. Data Protection Impact Assessment

- **Templates and support material**:
  - DPIA template "WeNet_DPIA-template_v0.1_draft.ppt" https://drive.google.com/open?id=1hE0aggtyrq-UDmjP1BZl5EAszg7VifrV

- **Mandatory outcomes**:
  - Finalized compiled DPIA document. WeNet project maintains a record of answers to the screening questions in order to document that the decision on whether to carry out a DPIA was properly considered

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[4] For how to name the folder, please have a look at the D10.1 Project Handbook

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- **Additional outcome requirements**
  - The naming conventions for outcomes, according to section 4.2.1 of the project handbook, must be followed.

The final version of the outcome documents must be uploaded in the storage folder[5] for the survey in the WP8 "Data Infrastructure" top-level folder. Each trial/pilot must create a subfolder specific to it and put these documents inside.

5.4.   Informed Consent

Personal data processing requires free and fully informed consent from the involved persons. In the WeNet project, all participation must be voluntary. As such, the data controller and/or related partners must (in advance) obtain and clearly document the participants' informed consent.

- **Scope**: Informed consent is necessary whenever a partner plans to involve research or study participants in any trial, pilot, survey or study within WeNet project.
- **Responsibilities**: the data controller (aided by the participating partners) is responsible for ensuring informed consent from all participants.
- **Procedure**:
  - Provide the information related to informed consent to all participants
  - Ensure that informed consent has been given

- **Templates and support material**:
The informed consent forms:
  - are written in a language and in terms the participants can fully understand
  - describe the aims, methods and implications of the research, the nature of the participation and any benefits, risks or discomfort that might ensue
  - explicitly state that participation is voluntary and that anyone (at any time and without consequences) has the right to refuse to participate and to withdraw their participation and generated data

- **Mandatory outcomes**:
  - The text used to provide information to the users
  - An information file containing a trace of the informed consent given
  - In the event that data collection is conducted with a paper-based (or other) alternative, the Informed Consent must be uploaded in pdf format

- **Additional outcome requirements**
  - The naming conventions for outcomes, according to section 4.2.1 of the project handbook, must be followed.
  - The outcome must be uploaded in the storage.

5.5.   Data Minimization

WeNet project should collect only the data needed to meet its research objectives. Collecting unneeded personal data may be deemed unethical and unlawful.
Before start any trial, pilot, survey or study within WeNet project the partners should conduct a data minimisation review to ensure that data are collected on a 'need to know' basis and report it in order to document that the principle was properly considered.

- **Scope**: Data minimisation review is necessary whenever a partner activates any trial, pilot, survey or study within WeNet project.
- **Responsibilities**: the researcher leading the survey is responsible for ensuring the review is carried out and confirmed by the Data Controller.

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[5] For how to name the folder, please have a look at the D10.1 Project Handbook

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- **Procedure**:
  - Conduct the review before any trial, pilot, survey or study is activated
  - The review applies not only to the amount of personal data collected, but also to the extent to which they may be accessed, further processed and/or shared, the purposes for which they are used, and the period for which they are kept.
  - Perform the review according to the WeNet project guideline described in D11.2 POPD document
  - Maintain the summary for the checks done in the project repository
- **Templates and support material**:
  - D11.2 POPD (Protection of Personal Data) Req. #6 contains the guidelines to apply the principles of data minimisation and data protection by design in practice. https://drive.google.com/open?id=1WLuHqUJ6G9ev078txN1Nm6H1OkKLtAiW
- **Mandatory outcomes**:
  - WeNet project maintains the summary related to the data minimisation control in order to document that the data minimisation principle was properly considered
- **Additional outcome requirements**
  - The naming conventions for outcomes, according to section 4.2.1 of the project handbook, must be followed.
  - The final version of the outcome documents must be uploaded in the storage folder[6] for the survey in the WP8 "Data Infrastructure" top-level folder. Each trial/pilot must create a subfolder specific to it and put these documents inside.

5.6. Data Preparation

WeNet partner should only use during data processing activities as much data as is required to successfully accomplish a given task.
At the end of the data collection campaign or before starting any subsequent study, the partners should conduct a data preparation task to ensure that the data minimisation principle is properly applied.

- **Scope**: Data preparation is necessary at the end of each data collection campaign or before starting any subsequent study that involves use of a dataset within WeNet project.
- **Responsibilities**: the Data Controller is responsible for carrying out this step, they may enlist the help of a Data Processor for the specific data process activities
- **Procedure**:
  - Conduct the data preparation operation to generate the survey input data from the collected data
  - The task is carried out under the responsibility of the original data controller of the collected data.
  - Personal and sensitive data will be removed. WeNet project protocol states that partners that are going to use that data for a survey should never have access to personal and sensitive data originally in the dataset (means anonymisation /pseudonymisation techniques are applied during data preparation).
  - Additionally, the process could optionally include steps towards making sure that all of the survey data is relevant and limited to the purposes of the survey (in accordance with the 'data minimisation' principle).
  - Document and maintain a summary report detailing the tasks performed as part of the Data Preparation the project repository
- **Templates and support material**:

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[6] For how to name the folder, please have a look at the D10.1 Project Handbook

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- D11.2 POPD (Protection of Personal Data) Req. #6 contains the guidelines to apply the principles of data minimisation and data protection by design in practice. https://drive.google.com/open?id=1WLuHqUJ6G9ev078txN1Nm6H1OkKLtAiW
- D10.2 DMP (Data management Plan) describes the data management lifecycle for the data to be collected, processed and/or generated by research projects. https://drive.google.com/open?id=1A73wkBzK0jXEsfhu5t38ShYWbteAE0ME

- **Mandatory outcomes**:
  - WeNet project maintains a summary report about the data preparation tasks in order to document that the data minimisation principle was properly considered

- **Additional outcome requirements**
  - The naming conventions for outcomes, according to section 4.2.1 of the project handbook, must be followed.
  - The final version of the outcome documents must be uploaded in the storage folder[7] for the survey in the WP8 "Data Infrastructure" top-level folder. Each trial/pilot must create a subfolder specific to it and put these documents inside.

5.7. Privacy statement

WeNet research involves human participants; the partner must inform the potential participants on the technical and organisational measures to safeguard the rights of the research participants.

- **Scope**: The privacy statement is a document that partners give to individual participants to explain how their personal data is processed. It has two aims: to promote transparency and to give individuals more control over the way their data is collected and used.

- **Responsibilities**: the data controller is responsible for the Privacy statements. They are a legal requirement under the GDPR to ensure that individuals are aware of the way their personal data is processed

- **Procedure**:
  - Identify the institution's DPO[8] (Data Protection Officer) or equivalent figure that will eventually assist in the compilation of the Privacy statement
  - Compile the Privacy statement using the WeNet template
  - (Optional) submit to DPO the Privacy statement and all relevant documents. In case the Privacy statement needs to be made in a non-English local language, an English version of the statement must also be prepared.
  - (Optional) Obtain the review from the DPO and implement any comments into a finalised version of the Privacy statement
  - Provide a privacy notice whenever we obtain a data subjects' personal information

- **Templates and support material**:
  - Privacy statement template "WeNet_Privacy-Informative-template_v0.1_draft.doc" https://drive.google.com/open?id=1AwDqyKGwnXYYR_N_54CPWZqtODN0cCBh

- **Mandatory outcomes**:
  - The privacy statement and other consent documents must be kept on files. All consents will have to be exported to pdf, with the necessary information (date time etc) for each user. This document will be uploaded to the project repository, creating a folder[9] for the survey in the WP8 "Data Infrastructure" folder.

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[7] For how to name the folder, please have a look at the D10.1 Project Handbook

[8] For Organization that must appoint a DPO under GDPR. The appointment of a DPO (Data Protection Office) under GDPR is mandatory for European public organization

[9] For how to name the folder, please have a look at the Project Handbook

- In the event that data collections are conducted with paper based (or other alternatives) Privacy Statement must be uploaded in pdf format
- **Additional outcome requirements**
    - The naming conventions for outcomes, according to section 4.2.1 of the project handbook, must be followed.

The outcome must be uploaded in the storage.

5.8.   Request for Data Processor

The 'data processor' processes personal data on behalf of the controller. Within the WeNet project, the procedure must ensure that any partners that process research data at the Data Controller request (and on his behalf) comply with the GDPR and the H2020 ethics standards.

- **Scope**: Anytime a Data Controller needs another party to act as Data Processor

- **Responsibilities**: The Data Controller is responsible for engaging the Data Processor/s with a prior written authorisation; according to this written authorisation the data processor also may be held liable, along with the controller or other processors, in case of GDPR infringements

- **Procedure**:
    - When the Data Controller wishes to subcontract certain activities, which imply the processing of personal data, to a Data Processor, a proper drafted data processing request is needed to adequately protect data controllers
    - The Data Controller has to draft a data processing agreement (or a letter of appointment as data processor, as it is commonly called in Italy)

- **Templates and support material**:
    - Request for data processing template "WeNet_Request_for_Data_Processor-template_v0.1_draft.doc"
    https://drive.google.com/open?id=1tvVomRfW3Ofx1LTxpN-8oExpRz2YOauy

- **Mandatory outcomes**:
    - Request for data processor documents must be kept on file.

- **Additional outcome requirements**
    - The naming conventions for outcomes, according to section 4.2.1 of the project handbook, must be followed.

The final version of the outcome documents must be uploaded in the storage folder[10] for the survey in the WP8 "Data Infrastructure" top-level folder. Each trial/pilot must create a subfolder specific to it and put these documents inside.

5.9.   Survey execution

The Code of Conduct of the WeNet Project sets forth the principles and ethical standards that underlie WeNet members' scientific and professional responsibilities and conduct.

- **Scope**: Researchers involved in the survey.

- **Responsibilities**: The partner leading the survey is responsible for ensuring the declaration of commitment of the researchers

- **Procedure**:
    - By signing the statement all involved researchers in the survey shall comply with the provisions of the WeNet ethical rules of professional conduct for treatments for statistical purposes or scientific research

- **Templates and support material**:

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[10] For how to name the folder, please have a look at the D10.1 Project Handbook

- Declaration of commitment "WeNet_Declaration_of_Commitment-template_v0.1_draft .doc"
    https://drive.google.com/open?id=1gBFNL-cJsvn6aHxc-Ys1uwt6epUR5Da4
- The WeNet Ethical Code of Conduct "WP11_WeNet_Code_of_Ethics_v0.1_draft.doc"
    https://drive.google.com/open?id=1Cx-S0JjGq6jPNqwyznJKf9KL3JjclHAP

- **Mandatory outcomes**:
  - Signed declaration of commitment must be kept on file.
- **Additional outcome requirements**
  - The naming conventions for outcomes, according to section 4.2.1 of the project handbook, must be followed.
  - The final version of the outcome documents must be uploaded in the storage folder[11] for the survey in the WP8 "Data Infrastructure" top-level folder. Each trial/pilot must create a subfolder specific to it and put these documents inside.

5.10. Data Curation and preservation

The collected data must be kept in a form that enables the data subjects to be identified for a period not exceeding what is necessary for the purposes for which they are processed. Data retention occurs for a specified time period, based on the legal agreements in force and the business needs. The appropriate curation methods are implemented accordingly: archiving (probative value), final purge (logical), physical destruction, anonymization, etc.

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[11] For how to name the folder, please have a look at the D10.1 Project Handbook

6. Survey Protocol

This section describes the entire survey preparation protocol, concerning both the questionnaires and the i-Log app. Each of these steps follows the submission and approval of all ethical and legal documents described above.
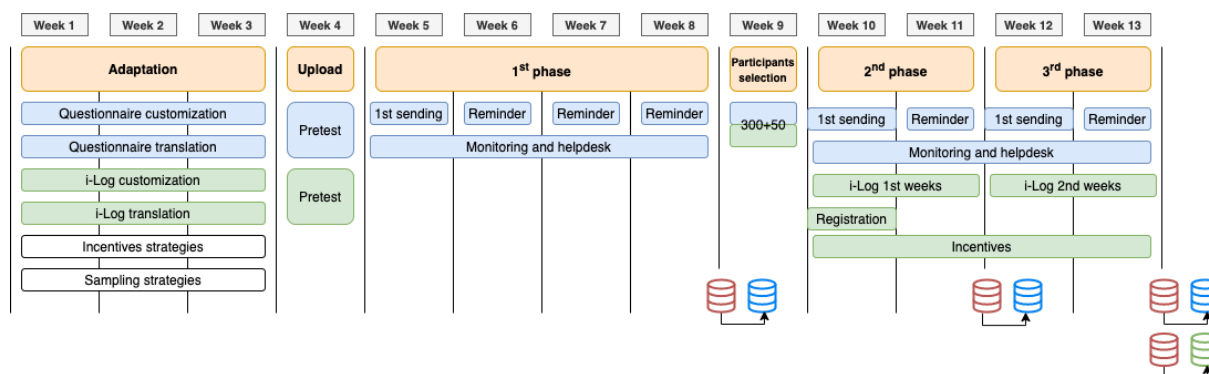
FIGURE 11 SURVEY PROTOCOL

In total, three questionnaires were sent: a first invitation questionnaire sent to the entire student population; a second at the beginning of the survey with i-Log and a third in the middle of the survey.

The preparation and management of each of the questionnaires was carried out on the basis of the activities described in fig. 3. The figure describes the operational sub-phases for the execution of the survey, concerning both the questionnaires and i-Logs. As regards the questionnaires, the sub-phases are:

1. **Questionnaire preparation**: the various phase to upload a final version of the questionnaire to be sent to students
2. **Data Collection**: data from questionnaire is collected.
3. **Server Decommission**: the technical infrastructure for the survey is decommissioned.
4. **Data Preparation**: the collected data is prepared by anonymizing, pseudonymizing and putting it into a data structure that will facilitate its analysis.

As regards i-Log, the sub-phases are:

1. **Functional & Technical Service Specification**: used to agree what is the technical configurations that will be needed for the expected size of the survey.
2. **Server Deploy**: deployment of all the technical infrastructure needed for the execution of the survey.
3. **Registration**: users may register to participate in the survey.
4. **Tech Test**: testing for sensors and questions are done towards early identification of problems in participants.
5. **Data Collection Period**: data from sensors and questions is collected.
6. **Server Decommission**: the technical infrastructure for the survey is decommissioned.
7. **Data Preparation**: the collected data is prepared by anonymizing, pseudonymizing and putting it into a data structure that will facilitate its analysis.

To facilitate the execution of the different phases, two templates have been produced, concerning both the questionnaires and the log:
- WP7_Monitoring_Protocol _template
- WP7_Survey_Protocol _Template

which can be found in Appendix 2.

The next sections will describe in detail the activities for each partner related to the sub-phases of preparation and management of the survey, as well as the related templates. The preparation consists of 7 sub-phases, to be done before the administration to the participants. They are:

1. Adaptation and Translation
2. Uploading
3. Sampling strategy
4. Incentives design
5. Sending and monitoring mailings
6. Data preparation
7. Data collection

Both AAU and UNITN supported towards the correct customization, translation, upload the questionnaire.

6.1. Adaptation and Translation

The first phase involved the adaptation of the survey tools by the partners involved. In this phase, each of the partners received both the questionnaires and the version of the app, including the time diaries and sensors collected. These tools were then evaluated and adapted to the specific contexts and needs of the partners, in accordance with the survey objectives mentioned above. The various questions present in the questionnaire which concerned specific contexts were therefore adapted - e.g. the name of the Departments or the list of daily activities within the time diaries - and modified the parts deemed sensitive in the different sites - e.g. the list of nationalities.

Once this part was finished, the two complete instruments of all parts in English were translated. Each partner therefore has:

1. Identifying the batteries present in the questionnaire already translated into their own language
2. Translating the remaining questions.

All partners have taken steps to:

1. Select two translators who do the translation separately
2. Select a reviewer who would evaluate the translations obtained

Each translated questionnaire and time diaries were then reviewed and validated.

6.2. Uploading and decommission

The translated versions of the questionnaires and time diaries have been uploaded to the respective platforms (LimeSurvey and i-Log) by UNITN.

Once the upload and the reviews were completed, the partners involved conducted:

- a pre-test for each of the questionnaires both in English and in the language of the country of origin
- a pre-test of the app

Each of the partners produced a questionnaire review document, specifying the necessary corrections and changes that have been made by UNITN.

To allow the various partners greater autonomy in the management of the connected questionnaires, an instruction booklet was produced, in addition to the information shared during the project meetings (see Appendix 2).

Once the upload phase was completed, the access permissions to the survey were changed, excluding partners not authorized to access the personal contents of the survey. Subsequently, each partner uploaded on LimeSurvey the list of emails and identifiers of the students present in their respective universities, following the instructions described in the annex and with the support of UNITN.

6.3. Sampling strategy

This sampling strategy is based on the experience related to previous surveys conducted at the University of Trento. Based on this, a first sample was defined in the entire population of students regularly enrolled in the various universities that took part in the survey. These were sent a first email invitation to the survey containing the link to the first questionnaire (see attachments).

Among the participants who filled out the first questionnaire, all those who met the following requirements were selected:

1. Having consented to the processing of personal data
2. Having agreed to participate in the second part of the survey
3. Have consented to be contacted
4. Having a smartphone with a version of Android 6.0 or higher installed

In the second phase of the survey, the goal was to reach around 250 participants. Given the high dropout rate in the registration and app installation phase, 350 participants were randomly selected. The first 300 participants received two email invitations, one for the second questionnaire and one for the installation of i-Log (see attachments). After the first 3 days of registration, a second invitation email was sent to the remaining 50 participants, with the aim of integrating the sample.

6.4. Incentives design

The general strategy was based on monetary incentives, as well as on reminders, both for the questionnaires and for the i-Log, and the support of the helpdesk (see 6.7. Sending and monitoring mailings).

Given the sampling strategy, no incentives other than reminders were provided for filling in the questionnaires. Within the first questionnaire, however, the invitation to take part in the second phase of the paid survey was specified.

As regards the second phase, 3 different types of incentives have been provided:

1. Payments for completing 85% of the survey
2. Daily prizes
3. Final prizes

Each of the partners has adapted the incentive strategy and remuneration based on the specifics of their country and sampling (see table below).

TABLE 3 INCENTIVES

	AAU	JLU	LSE	NUM	UC	UNITN
Questionnaire	.	8rmb	.	.	.	.
1st weeks	150kr	100rmb	.	10,000MNT	25.000 Gs	20€
2nd weeks	150kr	100rmb	.	10.000MNT	25.000 Gs	20€
Daily prizes	5 of 40kr	.	.	5.000MNT	10 vouchers	5 of 5€

Final prizes						
1st weeks	3 of 800kr	3 of 100rmb	£150 (1/50)	100.000MNT	1 voucher restaurants	3 of 100€
2nd weeks	3 of 1200kr	3 of 100rmb	£150 (1/50)	150.000MNT		3 of 150€

In the case of UNITN, AAU, UC, JLU and NUM, it was decided to pay the participants with the consideration of € 20 for the first two weeks of the survey with i-Log and € 20 for the second two, adjusted according to the basket of goods that can be purchased in each of the countries. Thus, a participant who completed at least 85% of the notifications for the entire month received a compensation of € 40.

As for the weekly prizes, only UNITN, AAU, UC, and NUM have chosen to adopt this strategy, with the consideration of 5 € for 5 participants drawn randomly every day for the first two and for the second two weeks of the survey. with i-Log and € 5 for the second two, adjusted according to the basket of goods that can be purchased in each of the countries. In the case of UC, it was preferred to dispense 5 vouchers for a lunch for one person in a restaurant every two weeks.

For UNITN, AAU, JLU and NUM finals the final prizes were defined as 3 prizes of € 100 (or corresponding) for the completion of the first two weeks, to be randomly awarded among the most active participants; and 3 prizes of € 150 (or equivalent) for the most active participants who attended the entire month. Otherwise, LSE placed 1 prize for every 50 participants of £ 150 for both the first and second two weeks. Instead, UC has placed as a final prize 1 voucher for a dinner for two at the restaurant.

Given the impossibility of contacting the participants via email, JLU has chosen to encourage the compilation of the questionnaire by paying around 1 € for each participant.

6.5. Sending and monitoring mailings

The sending of invitations and communication with participants took place in three phases.

In the first phase, an email was sent containing the description of the survey, the invitation to the first questionnaire and information on the second part of the survey (specified in the first questionnaire). This invitation was then reiterated through 4 reminders sent every week to all students who had not yet completed the survey.

At the end of the first phase, the participants in the second part of the survey were selected. To these were sent:
1. The second questionnaire at the beginning of the first two weeks of the survey with i-Log followed by a reminder after one week
2. The third questionnaire at the end of the first two weeks of survey, followed by a reminder after one week

In conjunction with the sending of the second questionnaire, an email was sent with instructions for downloading i-Log, accompanied by a short specification manual (see appendix).

At the end of the survey a last email was sent, with the steps to follow before uninstalling the app as well as a last reminder to fill in the second and third questionnaires - for the few participants who have not yet done so.

To facilitate the monitoring of users during the survey with i-Log and identify any problems, UNITN has produced daily reports containing:

- The number of notifications each participant responded to
- The amount of data collected by the individual sensors

Using this information, the field supervisors were able to contact the inactive participants during the survey every 3 days and support them in solving problems.
A further element of contact was the daily sending of the results of the daily prize draw to interested participants.
For each of the phases, the templates of the emails and the description of the survey and the invitation were produced to be sent to the participants (see Appendix 2).
Each of the phases was managed by the field supervisors appointed by each partner who took part in the survey. Field supervisors played the main role of providing support to the participants throughout the investigation. In order to prepare the field supervisors for the various tasks, specific meetings were held with each of them and a manual was produced, containing the description of i-Log and the FAQs found in the previous surveys conducted by UNITN (see appendix 2).

6.6. Data Preparation

Data preparation consists of two parts:
1. Selection of participants in the second phase of the survey
2. Anonymization of datasets and uploads to the research infrastructure

As regards the first part, a protocol document was produced (see appendix 2) to guide the partners in downloading the data of the first survey and in selecting the participants. Regarding the selection of participants, a script in R was produced which:
- Read the .csv dataset generated from the download
- Select the list of participants according to the survey prerequisites
- Select a subsample of 350 participants
- Create a dataset with the information needed to:
  a. Upload the participant list in the second and third questionnaire
  b. Contact the students
- Export the data in an excel format

Concerning the second part, namely the preparation of the datasets for uploading to the research infrastructure, in addition to the protocol document, a script in R was produced for the anonymization (deletion) of the personal data of the participants, i.e., name and addresses for the contact of the participants.
As for i-Log, the entire preparation and anonymization process is managed by UNITN.

6.7. Data Collection

To support and monitor the execution of the entire data collection, a table shared with partners (shown below) was produced. The table was updated daily with the dates scheduled for each of the sub-phases, highlighting the tasks already conducted.

TABLE 4 PART 1 - SURVEY DATES

Steps1/Partner	1.[UNITN] Documents ready	2.[LPARTNER] Digital DPA signed	3.[LPARTNER] Paper DPA signed	4.[LPARTNER] Upload of participants / link for surve available	5.[LPARTNER] Testing	6.[LPARTNER] Lime Surveys Campaign Start	7.[UNITN] Week1 end Update
AAU	2020/09/13	2020/09/25	2020/10/18	2020/09/25	2020/09/26	2020/09/28	2020/10/08
JLU	2020/09/13	2020/09/18	2020/11/08	2020/10/06	2020/10/07	2020/10/12	2020/10/15
LSE	2020/09/13	2020/10/09	2020/11/08	2020/10/13	2020/10/16	2020/10/19	2020/10/22
NUM	2020/09/13	2020/10/18	2020/10/18	2020/09/21	2020/09/21	2020/09/28	2020/10/08
UC	2020/09/13	2020/10/18	2020/10/18	2020/09/25	2020/09/26	2020/09/28	2020/10/08
UNITN1	-	-	-	-	-	2020/09/28	-
UNITN2	2020/09/13	2020/10/18	2020/10/18	2020/09/18	2020/09/19	2020/09/28	2020/10/08

TABLE 5 PART 2 - SURVEY DATES

Steps1/Partner	8.[UNITN] Week2 end Update	9.[UNITN] Materials for Data Preparation given	10.[UNITN] Week3 end Update	11.[UNITN] Week4 end Update	12.[LPARTNER] Lime Survey Campaign End	13.[LPARTNER] Start of data preparation	14.[LPARTNER] Data Preparation End
AAU	2020/10/15	2020/10/12	2020/10/22	2020/10/29	2020/11/05	2020/11/06	2020/11/06
JLU	2020/10/22	2020/10/12	2020/10/29	2020/11/05	2020/11/05	2020/11/06	2020/11/06
LSE	2020/10/29	2020/10/12	2020/11/05	-	2020/11/05	2020/11/06	2020/11/06
NUM	2020/10/15	2020/10/12	2020/10/22	2020/10/29	2020/10/05	2020/11/06	2020/11/06
UC	2020/10/15	2020/10/12	2020/10/22	2020/10/29	2020/10/29	2020/11/02	2020/11/06
UNITN1	-	-	-	-	2020/10/29	2020/11/02	2020/11/06
UNITN2	2020/10/15	2020/10/12	2020/10/22	2020/10/29	2020/10/29	2020/11/02	2020/11/06

TABLE 6 PART 3 - SURVEY DATES

Steps1/Partner	15.[UNITN] Second Survey ready and translated	16.[LPARTNER] Second survey for i-Log start	17.[LPARTNER] Second Survey for i-Log end	18.[LPARTNER] 2nd survey Data Preparation End	19.[UNITN] All data Uploaded in Research Infr.	20.[UNITN] Training session start/end	21.[UH] Cloud Server Ready
AAU	2020/10/30	2020/11/09	2020/11/23	2020/11/25	2020/12/02	2020/11/02	2020/10/30
JLU	-	-	-	-	-	-	-
LSE	2020/10/30	2020/11/17	2020/12/07	2020/12/09	2020/12/15	2020/10/29	2020/10/30
NUM	2020/10/30	2020/11/09	2020/11/23	2020/11/25	2020/12/02	2020/10/23	2020/10/30

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UC	2020/10/30	2020/11/09	2020/11/23	2020/11/25	2020/12/02	2020/10/30	2020/10/30
UNITN1	-	-	-	-	2020/12/02	-	2020/10/01
UNITN2	2020/10/30	2020/11/09	2020/11/23	2020/11/25	2020/12/02	2020/10/23	2020/10/30

TABLE 7 PART 4 - SURVEY DATES

Steps1/Partner	22.[UNITN] Server Deployment Finished	23.[LPARTNER] Field supervisor has selected emails from LimeSurvey	24.[LPARTNER] Registration and Helpdesk starts	25.[UNITN] Data Collection starts	26.[UNITN] Eo first day Update meeting	27.[UNITN] Eo Week1 Update meeting	28.[UNITN] Eo Week2 Update meeting
AAU	2020/11/06	2020/11/06	2020/11/10	2020/11/13	2020/11/13	2020/11/19	2020/11/26
JLU	-	-	-	-	-	-	-
LSE	2020/11/13	2020/11/16	2020/11/18	2020/11/20	2020/11/23	2020/11/30	2020/12/06
NUM	2020/11/06	2020/11/06	2020/11/10	2020/11/13	2020/11/13	2020/11/19	2020/11/26
UC	2020/11/06	2020/11/06	2020/11/10	2020/11/13	2020/11/13	2020/11/19	2020/11/26
UNITN1	2020/10/05	-	2020/10/12	2020/10/13	-	-	-
UNITN2	2020/11/06	2020/11/06	2020/11/10	2020/11/13	2020/11/13	2020/11/19	2020/11/26

TABLE 8 PART 5 - SURVEY DATES

Steps1/Partner	30.[UNITN] Eo Week3 Update meeting	31.[UNITN] i-Log Data Collection ends	32.[UNITN] Eo Data Collection Update meeting	33.[UNITN] Start of data preparation	34.[UNITN] Data Preparation End	35.[UNITN] Server decommision request	36.[UNITN] Data Upload in Research Infr.
AAU	2020/12/03	2020/12/11	2020/12/10	2020/12/10	2021/01/15	2021/02/08	2021/01/22
JLU	-	-	-	-	-	-	-
LSE	-	2020/12/18	2020/12/18	2020/12/18	2021/01/29	2021/02/08	2021/02/05
NUM	2020/12/03	2020/12/11	2020/12/07	2020/12/10	2021/01/15	2021/02/08	2021/01/22
UC	2020/12/03	2020/12/11	2020/12/08	2020/12/10	2021/01/15	2021/02/08	2021/01/22
UNITN1	-	2020/10/25	-	2020/10/25	2020/11/16	2020/11/26	2020/11/26
UNITN2	2020/12/03	2020/12/11	2020/12/10	2020/12/10	2021/01/15	2021/02/08	2021/01/22

7. Conclusion

The design of the research protocol is an essential step for any empirical study. It is even more so when the same research as an exploratory nature and its goal is to inform further development and testing as in this case.

In the social sciences, designing research instruments moves from defining a concept that is translated into indicators, each measuring a specific property and therefore constituting a variable because such properties can vary.

Social science researchers are aware of the partiality of the relationship between a concept and an indicator: a (general) concept cannot be exhausted by a single indicator. Most concepts that are interesting in the social sciences tend to be more abstract than concrete. Theoretical constructs, such as social capital, socioeconomic status, quality of life, etc., tend to be more abstract. Complex concepts differ from simple ones in that they are not easily operable. Many social concepts have a high level of generality and, therefore, are not directly observable. Many great theoretical importance concepts are so general that a single 'measure' operation cannot satisfactorily define them. A single indicator can never express an abstract concept in all its semantic extension, hence the need to resort to several indicators to try to 'cover' the concept as much as possible. Total coverage of the semantic extension of a concept is not feasible. Therefore, an indicator can only partially overlap with the concept for which it was chosen.

The challenge of tackling the concept of 'diversity' in an empirical study was precisely the case described above. We have operationalised diversity within the context of social practices and found indicators to measure the latter. There are, of course, other possible empirical implementation of the concept of diversity, but we believe that our choice was the best option in the context of this project.

We developed a multi-method and multi-country data collection to gather information about students' diversity of social practices. We collected data using 'traditional' methods such as a survey that, however, it required the design of ad hoc survey items. We also collected data using the iLog app, a smartphone app that collects different information types, including sensors.

Nevertheless, we faced an unprecedented challenge in our empirical study represented by the COVID-19 global pandemic. In social science research, the notion of ecological validity refers to the fact that the empirical data collection should reflect as much as possible everyday reality (of the people involved). In the context of a global pandemic, the criterion of ecological validity became problematic as such exceptional circumstances made some of our initial design not feasible or valid anymore. The pandemic and the related restrictions created a very new and dynamic context. We responded changing several times our instruments adapting them to the context as much as possible. A context that was often different between the countries involved.

The global pandemic was not the only challenge that this empirical study had to face. The data collection has been defined before as multi-method because it entails both the use of survey data, where there is a consolidated practice of protecting participants privacy and the use of a smartphone app, that posed new challenges. We have implemented a GDPR compliant research protocol in a large, multicountry and multimethod study, and that is something that required extra effort because of the novelty of GDPR for many institutions involved in this project.

Overall, the implementation of the diversity pre-pilot study has been complex and challenging, giving the context, and nevertheless, it has been successful for this type of data collection, which is exploratory and a pilot. The next deliverable 1.3 (that temporally follows this one) will contain the main results of our analysis of this empirical data collection.

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9. Appendix

9.1. Questionnaires

9.1.1. WeNet - Questionnaire Diversity

WeNet – Questionnaire Diversity

Legend
Question showed only for:

AAU	Aalborg University (DK)	
JLU	Jilin University (CN)	Question conditions
LSE	London School of Economics (UK)	
NUM	National University of Mongolia (MN)	
UC	Universidad Católica "Nuestra Señora de la Asunción" (PY)	
UNITN	University of Trento (IT)	

INFORMATIVE

A00. Having read the informative and the privacy policy in the email (also linked below) ... *
1. Yes, 2. No

1. ...do you agree to participate in the WENET-Internet of us survey and tell us about your experience as a student at the University of [...]? [If NO go to I05]
2. ...do you authorize access to your university administrative data?

*If not, you will not be able to continue with the investigation.
**The collected data will concern the number of exams, credits and average marks obtained at the end of each academic year

Informative [link]
Privacy Statement [link]

SOCIO-DEMOGRAPHICS

A1JLU. What is your student ID? _____

A01. Which gender were you born?
1. Male
2. Female

A02. When were you born? Year |___|

A03. What is your nationality? [List, see Appendix]

A03JLU. What is your nationality? [List, see Appendix]

A04. In what faculty/department are you studying?
A04AAU. [List, see Appendix]
A04JLU. [List, see Appendix]
A04LSE. [List, see Appendix]
A04NUM. [List, see Appendix]
A04UC. [List, see Appendix]
A04UNITN. [List, see Appendix]

A05. Type of degree
1. BSc
2. MSc

A05UNITN. Type of degree
1. BSc
2. MSc
3. 5 years

A06. Programme
1. Full Time
2. Part Time

A07. [Not for LSE if **A05=2** AND **A06=1**] Course year |___|

A08. You are
1. Regularly enrolled for a BAs/MAs degree
2. Register on supplementary year

A09. [Not for LSE, NUM, UC and UNITN] Where do you live during term time?
1. In the town where the university is located.
2. Close to the city where the university is located (less than 1.30 hours of travel). [go to A11]
3. In another city away from where the university is located (more than 1.30 hours of travel) [go to A11]
4. Abroad (e.g., Erasmus student) [go to B01]

A09UC. Where do you live during term time? [See Appendix]
A09UNITN. Where do you live during term time? [See Appendix]

A10. And exactly in which neighbourhood of the town do you live?
A10AAU. And exactly in which neighbourhood of the town do you live? [See Appendix]
A10LSE. In which area do you live? [See Appendix]
A10LSE. What is your first three digits of post code? [See Appendix]
A10NUM. Please, enter the zip code of where you live during term time [See Appendix]
A10UC. What area exactly do you live in? [See Appendix]
A10UNITN. And exactly in which district of the town do you live? [See Appendix]

A11. What kind of accommodation are you living in?
1. University students' Residence (dormitory) (e.g. LSE Hall of Residence, San Bartolameo, Danmarks Internationale Kollegium)
2. University flat
3. University campus
4. A private sector Hall of Residence (Private students' dormitory)
5. Rental house/flat
6. in a house/apartment owned (by you, your parents, or relatives)
7. guest of a private person
8. guest of friend or friends

A11NUM. What kind of accommodation are you living in? [See Appendix]

ONLY FOR NUM [See Appendix]

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PSYCHOSOCIAL PROFILE

B01. Describe yourself as you generally are now, not as you wish to be. Please use the scale below to rate how accurately each statement describes you.
1. Very Inaccurate, 2. Moderately Inaccurate, 3. Neither Accurate Nor Inaccurate, 4. Moderately Accurate, 5. Very Accurate

1. Am the life of the party
2. Sympathize with others' feelings
3. Get chores done right away
4. Have frequent mood swings
5. Have a vivid imagination
6. Don't talk a lot
7. Am not interested in other people's problems
8. Often forget to put things back in their proper place
9. Am relaxed most of the time
10. Am not interested in abstract ideas
11. Talk to a lot of different people at parties
12. Feel others' emotions
13. Like order
14. Get upset easily
15. Have difficulty understanding abstract ideas
16. Keep in the background
17. Am not really interested in others
18. Make a mess of things
19. Seldom feel blue
20. Do not have a good imagination

B02 Please read carefully the basic values listed below and their descriptions. Using the following answer scale, indicate by writing a number beside each value how important you consider each one of them as a guiding principle in your life.
1. Completely Unimportant, 2, 3, 4, 5, 6, 7. Utmost Importance

1. **SOCIAL SUPPORT**. To obtain help when you need it; to feel that you are not alone in the world.
2. **SUCCESS**. To reach your goals; to be efficient in everything you do.
3. **SEXUALITY**. To have sexual relationships; to obtain sexual pleasure.
4. **KNOWLEDGE**. To look for up to date news on not very well-known matters; to try to discover new things about the world.
5. **EMOTION**. To enjoy challenges or unknown situations; to look for adventure.
6. **POWER**. To have the power to influence others and to control decisions; to be the boss of a team.
7. **AFFECTIVITY**. To have a deep and enduring affectionate relationship; to have somebody to share successes and failures.
8. **RELIGIOSITY**. To believe in God as the saviour of humanity; to fulfil the will of God.
9. **HEALTH**. To look after your health at all times, not just when sick; not to be sick.
10. **PLEASURE**. To live for the moment; to satisfy all your desires.
11. **PRESTIGE**. To know that a lot of people know and admire you; when you are older to receive a homage for your contributions.
12. **OBEDIENCE**. To fulfil your daily duties and obligations; to respect your parents, superiors or elders.
13. **PERSONAL STABILITY**. To have the certainty that tomorrow you will have all that you have today; to have an organized and planned life.
14. **BELONGING**. To have good neighbourly relationships; to form part of a group (e.g., social, religious, sporting, etc.)
15. **BEAUTY**. To be able to appreciate the best in art, music and literature; to go to museums or exhibitions where you can see beautiful things.
16. **TRADITION**. To follow the social norms of your country; to respect the traditions of your society.

17. **SURVIVAL**. To have water, food and shelter every day in your life; to live in a place with enough food.
18. **MATURITY**. To feel that your purpose in life has been fulfilled; to develop all your capacities.

UNIVERSITY ATTENDANCE

C01. How many of the courses/laboratories/credit seminars you are currently attending are provided …...?

1. Online live synchronous	|__|	0. none
2. Online recorded asynchronous	|__|	0. none
3. Partly synchronously and partly asynchronously	|__|	0. None
4. In presence	|__|	0. none

C02. How often do you…? (1 "never" – 6 "very often")
- attend workshops or other academic activities
- take notes in class.
- review and arrange notes at the end of the lecture.
- audio record of the lecture.
- study and review note regularly during the class week
- schematize or summarizing books or notes related to a course
- take part in the activities organized by the course.
- use specialised websites (e.g., statistics, philosophy, physics….)
- use question & answers sites (e.g., Quora, Stack Overflow, Answers.com)
- use university websites/platform tools for learning (e.g. Moodle, etc.)
- use commercial education platform (e.g., Coursera, Udemy, Datacamp)

SOCIAL RELATIONS WITH PEERS/CLASSMATES.

D01. About how many university students can you contact for help in studying? |__|

D03. Are you in an informal study group(s) (beside the one you are in for the lab/class project)?
1) Yes
2) No [go to E01]

D04. How many informal study groups do you participate in? N= |___|

D05. About how many people are in the informal study group? If you have more than one, think about the one you meet most often. |___|

D06. How often do you meet? If you meet more than one, think about the one you meet most often.
1. Less than once a week
2. Once a week
3. Twice a week
4. Three days a week
5. Four days a week
6. Five or more days a week

VIRTUAL SOCIAL RELATIONS

E01. How often do use the following social networking channels?
(99) No account (1) Several times a day (2) about once a day (3) a few times a week (4) every few weeks (6) Rarely/Never
1. Twitter - Weibo
2. Facebook
3. LinkedIn

4. YouTube
5. Instagram
6. Telegram
7. Pinterest
8. Reddit
9. Flickr
10. Facebook messenger
11. WhatsApp
12. Google hangouts
13. Skype
14. Zoom
15. Snapchat
16. Tinder
17. WeChat
18. Viber
19. TikTok

E01JLU. How often do use the following social networking channels? [See Appendix]

E02. **Do you use social networking sites …** (1 "never" – 6 "very often")
1. to solve an academic problem?
2. to do research work?
3. for online academic group discussion?
4. to prepare for an examination communicate with your friends for preparation of exam?
5. for collaborative learning?
6. to keep you up to date with the activities of your university?
7. to seek help from your teachers?
8. to become sociable?
9. to create your social identity?
10. to attending social gathering?
11. to keep in touch with my friends?
12. to keep in touch with my relatives?
13. to get information regarding current social events?
14. for sharing pictures?
15. to look at funny stories?
16. for watching movies?
17. to get relief from academic stress?
18. for reading news?
19. to share new ideas?
20. for getting jobs related information?

E3. **You know what a chatbot is?**
1. Yes
2. No [go to F01]

E4. **Currently, do you use some chatbot?**
1. Yes [go to E06]
2. No

E5. **In the past, have you tried to talk/converse with a chatbot?**
1. Yes [go to F01]
2. No [go to F01]

E6. **How many chatbot apps have you installed on your smartphone?** N.|__|

E7. **Can you tell us which chatbot(s) you have installed on your smartphone?** App Name(s) (_____)

E8. **How often do use the chatbot?** (1) Rarely/Never; (2) Every few weeks; (3) A few times a week; (4) About once a day; (5) Several times a day

E9. **How much do you agree with the following statements about the decision to drop (deactivate) your chatbot**

account: (1) Totally disagree; (2) Disagree; (3) Neutral; (4) Agree; (5) Totally Agree
1. if the chatbot shows you ads (advertisements) based on your online activity
2. if the chatbot knew who you were, without logging in
3. if the chatbot analyzed you, even when using other apps (applications)
4. if the chatbot identified your age *
5. if the chatbot identified your gender *
6. if the chatbot identified your religious/political views *
7. if individuals or groups perform threating acts to other users, through the chatbot

ASSOCIATION

F01. **Are you a part of, or are you a member of, any student association or group and/or other nonstudents associations?** (e.g. religious, political, sports, etc.)
1) Only student ass. [go to F02]
2) Only nonstudent ass. [go to F04]
3) Both
4) No [go to G01]

F02. **How many student societies/associations do you belong to?**
N. |__|

F03. **Please mark the categories of interest of the society(ies) you belong to**
1. Faith
2. Arts and Performance
3. Activity and specialist (e.g., music, alt music, wine, dance, videos makers)
4. Cultural and National
5. Careers
6. Volunteering and Charity
7. Political (e.g., Pacifist, environmentalist, civil rights advocate, political party)
8. Media
9. Sport
10. Recreational
11. Other, specify: _____

F04. **Please mark the categories of interest of the society(ies) you belong to nonstudents association:**
1. Faith
2. Arts and Performance
3. Activity and specialist (e.g., music, alt music, wine, dance, videos makers)
4. Cultural and National
5. Careers
6. Volunteering and Charity
7. Political (e.g., Pacifist, environmentalist, civil rights advocate, political party)
8. Media
9. Sport
10. Recreational
11. Other, specify: _____

CULTURAL ACTIVITIES

PERFORMING ARTS

G01. **Have you done any of the following activities in the last year or so?** (1) YES (2) NO
1. Acted in a theatre play
2. Directed a theatre play
3. Performed as a stand-up comedian

4. Sung in a choir, a vocal ensemble, opera/operetta/musical troupe, pop-rock jazz, folk band, rapped
5. Played a musical instrument
6. Played a musical instrument in an orchestra or pop/rock/jazz/folk band
7. Composed music or performed as DJ
8. Danced (ballet or modern dance, ballroom dance, Latin American dance, jazz dance, hip hop, break dance, street dance, folk dance)
9. Did choreography for a dance performance

G02. How often, did you following, view and/or listen to the recordings of:
1. Never, 2., 3., 4., 5., 6. Very often
1. Theatre plays
2. Cabarets, or a stand-up comedy.
3. Ballets or a modern dance
4. Classical music
5. Opera
6. Musical
7. Pop or rock
8. Jazz or blues
9. Folk music concert
10. World music
11. Urban (rap, hip-hop, trap)
12. Dance or house
13. Popular national or local music
14. A singer/songwriter
15. Other music
16. A sport events

ARCHITECTURE, VISUAL ARTS AND CRAFTS

G05. Have you done any of the following activities during the last year or so?
5. Very often, 4., 3., 2., 1. Never
1. Created paintings, drawings, graphical works (by hand)
2. Created photographs as a hobby (excluding family and/or holiday pictures)
3. Created sculptures, pottery, glass, jewels, textile works
4. written any poetry, prose, fiction or non-fiction in your leisure time?
5. have a blog or an own website on the internet?
6. published your own work (novel) on paper?
7. published own work (novel) in whatever form on the internet (thus including weblogs, ezines and other internet publications)?
8. uploaded own film(s) or video(s) on the internet?
9. uploaded images of your work of visual arts and crafts on the internet?
10. uploaded either your own performance or performance of your company, ensemble, or group on the internet?

G07. During the last year or so…
5. Very often, 4., 3., 2., 1. Never
1. Did you view paintings, drawings, graphical works, photos, and sculptures, products of crafts or virtual exhibitions of visual arts or crafts (on the internet or other media)?
2. Did you view or listen to a programme about visual arts and crafts (on television, radio, video, DVD, internet, or other media)?
3. Did you visit a museum in your own country or abroad?
4. Did you visit galleries or exhibitions in your own country or abroad?
5. Did you visit monuments, historical or artistic places, famous buildings or archaeological sites in your own country or abroad?

6. Did you view virtual exhibitions of art or any kind of museum objects, monuments, historical or artistic places, buildings or sites (on the internet or other media)?
7. Did you make at least one film or one video as an artistic hobby (thus excluding family and holidays films or videos)
8. Did you go to the cinema or a film festival in your own country
9. Did you visit a zoo or animal park?
10. Did you visit a natural reserve?

BOOKS & BOOKSHOPS

G20. During the last year or so…
1. Never, 2., 3., 4., 5., 6. Very often
1. How often did you visit a bookshop in your own country or abroad?
2. How often did you visit an online bookshop and/or search for literature and other material available in a library on the internet?

G15. Approximately, how many books (printed or eBook) do you have where you live?
1. None
2. 1-25
3. 26-50
4. 51-100
5. 101-200
6. 201-400
7. More than 400

G16. During the last year or so … (1) Yes; (2) No
1. Did you read a printed book in your leisure time? [If YES go to G17]
2. Did you read a book in digital form (i.e. on the internet, downloaded from the internet) in your leisure time? [If YES go to G17]

G17. Which kind of books did you read? (tick all that apply)
1. Literature & Novels
2. Science Fiction & Fantasy
3. Mystery & Thrillers
4. History
5. Biographies
6. Health, Mind & Body
7. Other kind of boos

G18. In the last year or so, approximately how many books have you read (not for study)? |__|__|

G19. Do you read:
1. At least five times a week; 2. Every week or almost every week; 3. Few times a month; 4. Once a month; 5. Less often; 6. Never
1. printed magazines and/or periodicals in your leisure time?
2. magazines and/or periodicals in digital form (i.e., on the internet, downloaded from the internet) in your leisure time?
3. printed newspapers?
4. newspapers in digital form (i.e., on the internet, downloaded from the internet)?

G24. Do you…
1. Every day or almost every day; 2. Few times a week; 3. Few times a month; 4. Less than once a month; 5. Never
1. …watch films on television, videos, DVD, internet or other media?
2. …download films from the internet?

PARENTS EDUCATIONAL ATTAIMENT

H01F/M. Which is/was the highest educational level of your father/mother or guardian …?
1. Primary education

2. Lower secondary education
3. Upper secondary education
4. Post-secondary non-tertiary education
5. First stage of tertiary education (undergraduate qualification: BA)
6. Second stage of tertiary education (graduate degree qualification: MA)
7. Higher tertiary education (post-graduate degree qualification: Doctoral degree)
8. Prefer not to say
9. Don't know
10. Other, please specify:_____

H01LSE F/M. Which is/was the highest educational level of your father/mother or guardian …? [See Appendix]

PARENTS OCCUPATION

H02F/M. When you were 14 years old, did your father/mother or guardian work as …?
1. Employee [go to H03F/M]
2. Self-employed person [go to H04F/M]
3. Employed in law enforcement / armed forces [go to H03F/M]
4. Household
5. Retired
6. Other/unemployed
7. Missed/absent when I was 14 years old.
8. I prefer not to answer
9. Don't know

H03F/M. More precisely s/he or guardian is/was an….?
1. High-ranking executive (e.g., high government official, judge, university professor, general or colonel)
2. Senior employee – Manager/official (e.g., director, head researcher in private institutes, serving members of the military forces with a lower rank to a colonel, etc.)
3. Employee with high technical/scientific and professional qualification (e.g., engineer, chemist, physicist, social worker, graduate technician, publicist, etc.)
4. University lecturer (Associate professor)
5. Secondary school teacher
6. Primary school or pre-school teacher
7. Employee with high and middle qualification level (e.g., university researcher, chartered surveyor, accountant, data analyst, bank cashier, chief secretary, public relations agent, professional nurse, archivist, non-commissioned armed forces officer, etc.)
8. Secretary or similar
9. Managerial employee (e.g., front officer, receptionist, professional soldier, policeman and/or similar)
10. Salesman or similar
11. Worker in services (e.g., barman, waiter, chef, delivery person, domestic worker)
12. Foreman or supervisor
13. Skilled worker or similar (e.g., chief motor mechanic, chief printer, chief tool and die maker, chief electrician)
14. Semi-skilled worker (e.g., bricklayer, bus driver, cannery worker, carpenter, sheet metal worker, baker)
15. Unskilled worker
16. Agricultural worker – farm labourer–fisherman
17. Prefer not to say
18. Don't know
19. Other position as employee

H04F/M. More precisely s/he or guardian is/was an….?
1. Entrepreneur, CEO, Tenant farmer or similar with more than 50 employees

2. Entrepreneur, CEO, Tenant farmer or similar with 14-49 employees
3. High-rank administrator, managing director (e.g., banker, executive in big business, high government official, union official)
4. Freelance worker (e.g., teacher, engineer, artist, accountant)
5. Self-employed worker/ craftworker with 1-14 employees
6. Self-employed worker/ craftworker without employees
7. Occasional self-employed worker
8. Self-employed workers without specific qualification (e.g., delivery person, driver, street vendor)
9. Tenant farmer or similar with 1-14 employees
10. Tenant farmer or similar without employees
11. Family helper in industry and services
12. Family helper in the agricultural sector
13. Member of a Co-operative company
14. Prefer not to say
15. Don't know
16. Other position as self-employed worker

PERSONALITY (only for JLU)

BFI15. Describe yourself as you generally are now, not as you wish to be. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are and roughly your same age. Please use the scale below to rate how accurately each statement describes you
1. I often worry about trifles.
2. I often feel disturbed.
3. I always worry that something bad is going to happen.

4. I like to plan things from the beginning.
5. I am diligent in my work or study.
6. One of my characteristics is doing things logically and orderly.
7. I think most people are well-intentioned.
8. Although there are some frauds in the society, I think most people can be trusted.
9. Although there are some bad things in human society (such as war, evil and fraud), I still believe that human nature is generally good
10. I'm a person who loves to take risks and break the rules.

11. I like adventure.
12. I have a spirit of adventure that no one else has.
13. I'm bored by parties with lots of people.
14. I try to avoid parties with lots of people and noisy environments.
15. I like to go to social and recreational parties.

FINAL QUESTION (INVITATION)
[See Appendix]

I00. Do you want to participate?
1. Yes
2. No [go to I05]

I01. Your personal main smartphone is an:
1. iPhone[1] [go to I05]
2. Android operating system (Samsung, etc…) with version 5.0 or higher?[2]
3. Another operating system [go to I05]

[1]Unfortunately, the app is ONLY available for Android devices.
[2]To know your operating system go to Settings on your smartphone and click 'Info on the device/phone'

I02. We would ask you your university and/or personal mail to contact you*.
1. University mail
2. Personal mail

*To complete the installation of the app you will need a GMAIL address. If you are selected to participate in the second phase of the survey and do not have a Gmail address, you will be asked to activate one of your own. Please do not use other people's Gmail addresses.

I02JLU. Please give us your contact details [See Appendix]
I02NUM. Please give us your contact details [See Appendix]
I02UC. Please give us your contact details [See Appendix]

I03. How many Mobile phones do you have? N. |__|

I04. I agree to report my name to the person in charge of the research project entitled WeNet - Internet of us (https://www.internetofus.eu/) and to be contacted to receive further explanations for my possible participation.
1. Yes
2. No [go to I05]

I05NoRequirements. We are sorry, unfortunately you are not eligible to participate in the survey, but we thank you very much for your valuable contribution!

I06. Thank you for joining the initiative!
In the next days, you will be contacted by our team who will provide you all the information to participate in the experiment.

APPENDIX

NATIONALITY LIST

Afghan
Albanian
Algerian
American
Andorran
Angolan
Antiguan and Barbudan
Argentine
Armenian
Aruban
Australian
Austrian
Azerbaijani
Bahamian
Bahraini
Bangladeshi
Barbadian
Basque
Belarusian
Belgian
Belizean
Beninese
Bermudian
Bhutanese
Bolivian
Bosniak
Bosnians and Herzegovinian
Botswana
Brazilian
Breton
British
British Virgin Islander
Bruneian
Bulgarian
Macedonian Bulgarian
Burkinabé
Burmese
Burundian
Cambodian
Cameroonian
Canadian
Catalan
Cape Verdean
Chadian
Chilean
Chinese
Colombian
Comorian
Congolese
Costa Rican
Croat
Cuban
Cypriot
Czech
Danish
Greenlander
Djiboutian
Dominican (Commonwealth)
Dominican (Republic)
Dutch
East Timorese
Ecuadorian

Egyptian
Emirati
English
Equatoguinean
Eritrean
Estonian
Ethiopian
Falkland Islander
Faroese
Fijian
Finn
Finnish Swedish
Filipino
French citizen
Gabonese
Gambian
Georgian
German
Baltic German
Ghanaian
Gibraltarian
Greek
Greek Macedonian
Grenadian
Guatemalan
Guianese (French)
Guinean
Guinea-Bissau national
Guyanese
Haitian
Honduran
Hong Konger [not for JLU]
Hungarian
Icelander
I-Kiribati
Indian
Indonesian
Iranian
Iraqi
Irish
Israeli
Italian
Ivoirian
Jamaican
Japanese
Jordanian
Kazakh
Kenyan
Korean
Kosovar
Kuwaiti
Kyrgyz
Lao
Latvian
Lebanese
Liberian
Libyan
Liechtensteiner
Lithuanian
Luxembourger
Macao [not for JLU]
Macedonian
Malagasy
Malawian
Malaysian
Maldivian
Malian

Maltese	Syrian
Manx	Taiwanese [not for JLU]
Marshallese	Tamil
Mauritanian	Tajik
Mauritian	Tanzanian
Mexican	Thai
Micronesian	Tibetan
Moldovan	Tobagonian
Monégasque	Togolese
Mongolian	Tongan
Montenegrin	Trinidadian
Moroccan	Tunisian
Mozambican	Turkish
Namibian	Tuvaluan
Nauran	Ugandan
Nepalese	Ukrainian
New Zealander	Uruguayan
Nicaraguan	Uzbek
Nigerien	Vanuatuan
Nigerian	Venezuelan
Norwegian	Vietnamese
Omani	Vincentian
Pakistani	Welsh
Palauan	Yemeni
Palestinian	Zambian
Panamanian	Zimbabwean
Papua New Guinean	
Paraguayan	
Peruvian	
Pole	
Portuguese	
Puerto Rican	
Qatari	
Quebecer	
Réunionnai	
Romanian	
Russian	
Baltic Russian	
Rwandan	
Saint Kitts and Nevis	
Saint Lucian	
Salvadoran	
Sammarinese	
Samoan	
São Tomé and Príncipe	
Saudi	
Scottish	
Senegalese	
Serb	
Seychelloi	
Sierra Leonean	
Singaporean	
Slovak	
Slovene	
Solomon Islander	
Somali	
Somalilander	
Sotho	
South African	
Spaniard	
Sri Lankans	
Sudanese	
Surinamese	
Swazi	
Sweden	
Swiss	
Syriac	

DEPARTMENT/COLLEGE

A04AAU. Department/College
1. Electronic Systems
2. Architecture, Design and Media Technology
3. Chemistry and Bioscience
4. Communication and Psychology
5. Culture and Learning
6. Planning
7. Mathematical Sciences
8. Materials and Production
9. Business and Management
10. Sociology and Social Work
11. Political Science
12. Clinical Medicine
13. Built Environment

A04LSE. Department/College
1. Department of Accounting
2. Department of Anthropology
3. Department of Economics
4. Department of Economic History
5. European Institute
6. Department of Finance
7. Department of Gender Studies
8. Department of Geography and Environment
9. Institute of Global Affairs (IGA)
10. Department of Government
11. Department of Health Policy
12. Department of International Development
13. Department of International History
14. International Inequalities Institute
15. Department of International Relations
16. Language Centre
17. Department of Law
18. Department of Management
19. Marshall Institute
20. Department of Mathematics
21. Department of Media and Communications
22. Department of Methodology
23. Department of Philosophy, Logic and Scientific Method
24. Department of Psychological and Behavioural Science
25. School of Public Policy (formerly Institute of Public Affairs)
26. Department of Social Policy
27. Department of Sociology
28. Department of Statistics

A04JLU. Department/College
1. School of Philosophy and Society
2. Art college
3. Archaeological Institute
4. Foreign Language School
5. Art Academy
6. Sports Academy
7. School of Mathematics
8. School of Physics
9. School of Chemistry
10. College of Life Sciences
11. School of Electronic Science and Engineering
12. School of Communication Engineering
13. School of Computer Science and Technology
14. Software College
15. School of Economics
16. Law school
17. School of Administration
18. Business school
19. Institute of Finance

20. School of Mechanical Engineering
21. School of Automotive Engineering
22. material science and Engineering School
23. Jiaotong University
24. College of Biological and Agricultural Engineering
25. School of Management
26. School of Food Science and Engineering
27. School of Earth Sciences
28. School of Earth Exploration Science and Technology
29. School of Construction Engineering
30. School of New Energy and Environment
31. School of Instrument Science and Electrical Engineering
32. Basic Medical School
33. School of Public Health
34. College of Pharmacy
35. School of Nursing
36. School of Clinical Medicine
37. Bethune First Hospital
38. Bethune Second Hospital
39. Bethune Third Hospital
40. Bethune Dental Hospital
41. School of Animal Medicine
42. Faculty of Plant Science
43. College of Animal Science
44. Artificial Intelligence Academy

A04NUM. Department/College
1. Business School
2. School of International Relations and Public Administration
3. School of Law
4. School of Engineering and Applied Sciences
5. School of Sciences – Division of Social Sciences
6. School of Sciences – Division of Natural Sciences
7. School of Sciences – Division of Humanities

A04UC. Department/College
1. Facultad de Ciencias Contables, Administrativas y Económicas
2. Facultad de Ciencias y Tecnología
3. Facultad de Ciencias de la Salud
4. Facultad de Ciencias Jurídicas y Diplomáticas
5. Facultad de Filosofía y Ciencias Humanas

A04UNITN. Department/College
1. CIBIO
2. Economics and Management
3. Faculty of Law
4. Physics
5. Civil, Environmental and Mechanical Engineering
6. Information Engineering and Computer Science
7. Industrial Engineering
8. Humanities
9. Mathematics
10. Psychology and Cognitive Science
11. Sociology and Social Research
12. Center Agriculture Food Environment
13. CIMeC - Centre for Mind/Brain Sciences
14. SSI - School of International Studies
15. Other structures

PLACES

A09UC. Where do you live during term time?
1. Asunción [go to A10UC]
2. In the town where the university is located.
3. Close to the city where the university is located (less than 1.30 hours of travel).

4. In another city away from where the university is located (more than 1.30 hours of travel)
5. Abroad (e.g. Erasmus student)

A09UNITN. Where do you live during term time?
1. Trento [go to A10UNITN]
2. Rovereto
3. Close to the city where the university is located (less than 1.30 hours of travel).
4. In another city away from where the university is located (more than 1.30 hours of travel)
5. Abroad (e.g. Erasmus student)

A10AAU. And exactly in which neighbourhood of the town do you live?
1. Vesterbro/Kongens Enghave
2. Nørrebro
3. Østerbro
4. Amager Øst
5. Amager Vest
6. Valby
7. Bispebjerg
8. Vanløse
9. Brønshøj-Husum

A10LSE. In which area do you live?
1. London Central (30 minutes from LSE)
2. Outer London (1hour from LSE)
3. Outside London

A10LSE. What is your first three digits of post code? |__|__|__|

A10NUM. Please, enter the zip code of where you live during term time*
* Please, find zip code of the place using the website http://zipcode.mn/map#mongolia

A10UC. What area exactly do you live in?
1. Centro
2. Sajonia
3. San Vicente y Santa Ana
4. Mcal López1 (entre Brasil y Gral Santos)
5. España1 (entre Brasil y Gral Santos)
6. Mcal López2 (entre Gral Santos y Rca. Argentina)
7. España2 (entre Gral Santos y Rca. Argentina)
8. Pinoza/ Seminario
9. Los Laureles
10. Shopping del Sol hasta calle Última
11. Trinidad
12. Loma Pyta

A10UNITN. And exactly in which district of the town do you live?
1. Center (from Cristo Re/San Martino to Fersina)
2. Piedicastello/Vela
3. Trento North (from Gardolo to loc.Solteri/Via Brennero/Via Maccani)
4. North of Gardolo (Lavis, Meano, Spini)
5. Argentario (Cognola/Martignano/Montevaccino/Villamontagna)
6. East hill (Mesiano/Povo/Oltrecastello/San Donà/Cognola/Villazzano)
7. Trento South (Bolghera/Clarina/San Bartolomeo/Madonna Bianca/Villazzano Tre)
8. Mattarello/Ravina/Romagnano
9. Bondone/Cadine/Sardagna/Sopramonte

A11NUM. What kind of accommodation are you living in?
1. University dormitory (dormitory)
2. In the university apartment
3. Dormitory (Private dormitory)
4. Rental apartment / house
5. Own apartment or house (may be yours, parents 'or relatives')
6. As a private guest / guest (adjoining room for rent)
7. As a friend or guest of friends
8. Mongolian ger and fence
9. Fence in the house

ONLY FOR NUM

N01. How did you make a decision to become a student?
1. By myself
2. Followed my parents' advice
3. Followed my brother/sister's advice
4. Other, please specify: ____

N02. Are you a resident of the city?
1. Born in the city
2. Migrated to the city [go to N03]

N03. From where did you migrate?
1. Arkhangai
2. Bayan-Ulgii
3. Баянхонгор
4. Bayankhongor
5. Govi-Altai
6. Govisumber
7. Darkhan-Uul
8. Dornogovi
9. Dornod
10. Dundgovi
11. Zavkhan
12. Orkhon
13. Uvurkhangai
14. Umnugovi
15. Sukhbaatar
16. Selenge
17. Tuv
18. Uvs
19. Khovd
20. Khuvsgul
21. Khentii

N04. For how long are you living in the current place?
1. Less than 1 year
2. 1-2 years
3. 3-4 years
4. 4-5 years
5. 5 or more years

N05. Before coming to the current place, where were you living? *
_____

*Please, find zip code of the place using the website http://zipcode.mn/map#mongolia Please choose the last place.

N06. Please, give the reason to migrate to the city
1. To study
2. Followed my parent's decision
3. Followed my brother/sister's decision

4. To work
5. To change my living place
6. Other, please specify: ____

SOCIAL MEDIA
E01JLU. How often do use the following social networking channels?
(99) No account (1) Several times a day (2) about once a day (3) a few times a week (4) every few weeks (6) Rarely/Never

1. Weibo(微博)
2. LinkedIn
3. Bilibili
4. Acfun
5. lvzhou(绿洲)
6. Telegram
7. Pinterest
8. Huaban(花瓣)
9. Xiaohongshu(小红书)
10. Reddit
11. Tieba(贴吧)
12. Douban(豆瓣小组)
13. Skype
14. Zoom
15. Tencent Meeting(腾讯会议)
16. DingDing(钉钉)
17. Tinder
18. Tantan(探探)
19. Momo(陌陌)
20. WeChat(微信)
21. QQ
22. TikTok(抖音)
23. Kuaishou(快手)
24. Huoshan (火山小视频)

PARENTS EDUCATION
H01LSE F/M. Which is/was the highest educational level of your father/mother or guardian …? [See Appendix]

1. Nursery schools, Playgroups, Reception classes; left school before age 11
2. Primary school, Adult literacy and numeracy courses; left school at age11–14(no qualification)
3. GCSE, SCE Standard Grade (general), NVQ Level1 (pre-vocational), NVQ Level2 (vocational); Left school after age 14 without qualification
4. GCEA/AS Level, Higher Grade, CSYS (general), GNVQ/GSVQ Advanced, NVQ Level3 (vocational); Left school after age 14 without qualification
5. HE Access Courses
6. medium: BA
7. long: MA, PGCE, PGDE; NVQ4&5, HNC, HND, CertHE, DipHE
8. Doctorate
9. Other
10. Prefer not to say
11. Don't know

FINAL QUESTION

AAU INVITATION
Would you like to shape the next generation of services available at your university? Then, join the next phase of our survey! We are looking for 300 students to participate in a paid experiment to test a new data collection smartphone app.

The experiment will start at the beginning of NOVEMBER and will last for two weeks. If you accept to participate, during this period you will receive four short questions every half hour for you to respond throughout the day. If you complete the task successfully, you will be paid 150 kr and you will have the opportunity to be selected (from a random draw) for a telephone top-up of 40 kr, in a daily draw of 5 participants. You will also have the opportunity to participate in a random draw for the final three prizes of 800 kr.

If you wish, you can also continue to use the App for another two weeks. In these two additional weeks your commitment will be reduced and the request to answer the three questions will be every 1 hour. If you complete the task successfully, you will be paid an additional 150 kr, and have the opportunity to participate in the daily random draw for 5 phone top-ups of 40 kr each. You have also the opportunity to participate in the final extraction of three prizes of 1200 kr.

Your contribution is important to us.

If you are interested, please answer the next five questions.

Feel free to contact us at helpdeskAAU@we-net.eu for further information about the experiment.

Thanks in advance for your attention. Looking forward to listening from you,

Prof. Amalia De Götzen

LSE INVITATION
Would you like to contribute to shape the next generation of online services available at the LSE and other universities? If so, then apply to join the next phase of our study, a test of a new data collection application to be installed on smartphones.

The study will last two weeks, during which participants be sent three short questions every half hour, which can be answered at any time during the day. Having completed the two weeks they will be entered into a lottery with a 1 in 50 chance of winning £150, For those who would like to continue for another two weeks, the commitment will be reduced to three question every hour. Those completing this extension will be entered into a second lottery with a 1 in 50 chance of winning £150.

We very much hope that you will put your name forward to be considered for this study. We aim to have 300 participants from across the School's departments.

If you are interested, open the link below and answer three questions the responses to which will guide our selection of a broad sample of participants.

For clarification on any issues you can contact the following email address: helpdeskLSE@we-net.eu

With thanks and our best wishes from the WeNet pilot study coordinators

Profs George Gaskell (LSE), Ivano Bison (Trento) and Amalia de Goetz (Copenhagen)

JLU INVITATION
Do you want to contribute to the construction of the next generation of universities? We sincerely invite you to join our in-

depth investigation! We are looking for 300 students to join a paid experiment that started in the middle of this month (November 23) to test a new data collection application installed on a smartphone.

The experiment will last for 2 weeks, during which three short questions will be sent to you every half an hour, and you will need to answer the questions every day. If you successfully complete the task, you will be paid 100 yuan (2 weeks).

If you want, you can continue to use the app for 2 weeks. In these two extra two weeks, your work will be reduced, and the frequency of three questions will be reduced to once an hour. If you successfully complete the task, you will be paid an additional 100 yuan (2 weeks).

Students who have fully participated in the 4-week experiment will also have the opportunity to participate in three additional prizes of 100 yuan (randomly drawn).

Your contribution is very important to us.
If you are interested in our research, please open the link below and answer three questions:

_
If you have any questions or requests, please contact the following email address:
wenet_jlu@hotmail.com
To thank you for your attention, we would like to extend our sincere thanks and greetings to you.
Professor Xu Hao, Professor Fausto Giunchiglia

NUM INVITATION

Would you like to shape the next generation of services available at your university? Then, join the next phase of our survey! We are looking for 300 students to participate in a paid experiment to test a new data collection smartphone app.

The experiment will start at the beginning of NOVEMBER and will last for two weeks. If you accept to participate, during this period you will receive four short questions every half hour for you to respond throughout the day. If you complete the task successfully, you will be paid 10,000 MNT and you will have the opportunity to be selected (from a random draw) for a telephone top-up of 5,000 MNT, in a daily draw of 5 participants. You will also have the opportunity to participate in a random draw for the final three prizes of 100,000 MNT.

If you wish, you can also continue to use the App for another two weeks. In these two additional weeks your commitment will be reduced and the request to answer the three questions will be every 1 hour. If you complete the task successfully, you will be paid an additional 10,000 MNT, and have the opportunity to participate in the daily random draw for 5 phone top-ups of 5,000 MNT each. You have also the opportunity to participate in the final extraction of three prizes of 150,000 MNT.

Your contribution is important to us.

If you are interested, please answer the next five questions.

Feel free to contact us at helpdeskNUM@we-net.eu for further information about the experiment.

Thanks in advance for your attention. Looking forward to listening from you,

Sincerely yours
Deputy prof. Amarsanaa Ganbold

UC INVITATION

Would you like to contribute to shape the next generation of services available at your university? Then join the next phase of our survey! We are looking for 300 students to participate in a paid experiment that will start during this semester, to test a new data collection application to be installed on your smartphone.

The experiment will last two weeks, during which you will be sent four short questions every half hour, which you can answer throughout the day. If you complete the task successfully, you will receive a telephone top-up (or e-wallet) of 25.000 guaraníes and you will have the opportunity to be selected (from a random draw) for a dinner voucher at a local restaurant, in a drawing of 5 vouchers.

If you wish, you can also continue to use the App for another two weeks. In these two additional weeks your commitment will be reduced and the request to answer the three questions will be every 1 hour. If you complete the task successfully, you will receive an additional telephone top-up (or e-wallet) of 25,000 guaraníes, and will again have the opportunity to participate in a random drawing for a dinner voucher at a local restaurant, in a drawing of 5 vouchers. You will also have the opportunity to participate in the extraction of a final prize consisting of a voucher for a dinner for two at a local restaurant, randomly drawn among the participants who remain during the 4 weeks of the experiment and register the higher percentage of completed tasks.

Your contribution is important to us.

If you are interested, please answer the next five questions. Feel free to contact us at helpdeskUC@we-net.eu for further information about the experiment. Thanks in advance for your attention.

Looking forward to listening from you,

Prof. Luca Cernuzzi

UNITN INVITATION

Would you like to shape the next generation of services available at your university? Then, join the next phase of our survey! We are looking for 300 students to participate in a paid experiment to test a new data collection smartphone app.

The experiment will start at the beginning of NOVEMBER and will last for two weeks. If you accept to participate, during this period you will receive four short questions every half hour for you to respond throughout the day. If you complete the task successfully, you will be paid 20 euros and you will have the opportunity to be selected (from a random draw) for a telephone top-up of 5 euros, in a daily draw of 5 participants. You will also have the opportunity to participate in a random draw for the final three prizes of 100 euros.

If you wish, you can also continue to use the App for another two weeks. In these two additional weeks your commitment will be reduced and the request to answer the three questions will be every 1 hour. If you complete the task successfully, you will be paid an additional 20 euros, and have the opportunity to participate in the daily random draw for 5 phone top-ups of 5 euros each. You have also the opportunity to participate in the final extraction of three prizes of 150 euros.

Your contribution is important to us.

If you are interested, please answer the next five questions.

Feel free to contact us at helpdeskUNITN@we-net.eu for further information about the experiment.

Thanks in advance for your attention. Looking forward to listening from you,

Prof. Ivano Bison

I02JLU. Please give us your contact details [See Appendix]
1. Email
2. Phone number
3. WeChat number
4. QQ number

I02NUM. Please give us your contact details [See Appendix]
1. Registration number
2. SiSi ID
3. Mobile phone number
4. University email address
5. Personal email address

I02UC. Please give us your contact details [See Appendix]
1. Personal email

9.1.2. WeNet - Questionnaire i-Log

WeNet – Questionnaire n.2
(Before i-Log administration)

ACCOMODATION & UNIVERSITY ROUTINE

A01. With whom do you live?
1. Alone [Go to A07]
2. Other students
3. Partner
4. Your children
5. Parents or other relatives [Skip C01]
6. Other, please specify: _____

A02. In addition to you, how many people do you share the accommodation with? |__|

A03. How many of these people attend university? |__|

A04. Do you have a:
1. Single bedroom
2. Bedroom shared with another person
3. Bedroom shared with two people or more

A06. In your accommodation, which items do you have?
(Multiple choice)
1. Colour television (common area)
2. Colour television (in your bedroom)
3. Home theatre/Stereo system
4. Satellite dish / Sky TV
5. Home computer/PC
6. Laptop computer
7. Tablet
8. Landline telephone
9. Dishwasher
10. Wi-Fi

A07. All in all, what is your commute time and distance from your accommodation to university department?
1. Time in minutes _____
2. Distance in Km _____ (Note: use decimals to indicate meters. For example, enter 0.800 if you travel 800 meter or write in 2.5 if you travel two and a half kilometres.)

WORK ACTIVITY

A08. Have you been in paid employment in the last year or so?
1. Yes
2. No

A09. Do you currently do any work, including occasional work?
1. Yes
2. No

TRANSPORTS

B01. Do you have …?
1. Yes, 2. No
1. …a car driver's license?
2. …a motorbike driver's license?
3. …a bike of your own?
4. …a car of your own?
5. …a motorbike of your own?
6. …access to a car whenever you want?
7. …access to a motorbike whenever you want?

B02. What is the main method that you use for getting about in your daily life? (Multiple choice)
1. Walking
2. Cycling
3. Car (Filter: go to question
4. Car-sharing (with friends/relative etc.)
5. Motorbike
6. City bus/suburban bus/Tube (Public Transport)
7. Train
8. Electric scooters

B03. How often do you use public transport in the weekday?
1. Never
2. Less than once a week
3. Once a week
4. Once or twice a week
5. Most days
6. Everyday

COOKING AND SHOPPING HABITS

We would like to study your consumption habits. This section explores your cooking habits and competencies as well as your shopping behaviour.

C01. Would you say you know how to cook?
1. Yes, I know how to cook.
2. Yes, but only basic things.
3. No, I do not know how to cook. [go to D01]

C02. Is there a kitchen in your accommodation that you can use?
1. Yes, there is a kitchen that I can regularly use.
2. Yes, there is one but I don't have regular access to it.
3. No, there is no kitchen.

C03. How good you are at each of the following tasks:
1. Very poor, 2, 3, 4, 5, 6, 7. Very good, 99. Don't Know/Can't say
1. baking cakes, cupcakes, cookies, bread from raw ingredients
2. peeling and chopping raw vegetables (including potatoes, carrots, onions, broccoli)
3. preparing and cooking raw meat (red meat and poultry)
4. preparing and cooking raw fish
5. following recipes when cooking

C04. How often do you cook a main meal?
1. Daily
2. Several times a week
3. Once a week
4. Less than once a week
5. Never

C05. Please, indicate your level of agreement with the following statements. (1) strongly disagree - (7) strongly agree
1. Cooking makes me happy.
2. Cooking is time consuming.
3. I am good at cooking.
4. Cooking is costly.
5. Cooking helps me eat healthy.
6. Cooking is difficult.
7. Cooking is important to me.
8. Cooking is just a chore I have to do.
9. When cooking, I like to try new recipes.

C06. When looking for ideas or inspiration about cooking, what are you most likely to do? (Multiple choice)
1. Turn to your family for tips
2. Look online for recipes
3. Look in cookbooks/magazines
4. Use recipe apps
5. Watch cooking shows online or on TV
6. Ask friends for ideas

C07. Let us talk about your diet. Which of the following applies to you? (Multiple choice)
1. I don't follow a specific diet
2. I follow a vegetarian or vegan diet
3. I avoid certain foods for religious or cultural reasons
4. I avoid or limit my intake of certain foods due to health problems (allergies, gluten intolerance, …)
5. I have no health issues but follow a health-food diet rigidly
6. I limit consumption of certain foods to lose/maintain weight
7. I like to try new foods and tastes.

C08. Which of the following statements best describes you?
1. For me, eating is a pleasure.
2. Eating for me is just a way not to feel hungry.

C09. Last month, how often did you shop for food groceries?
1. Rarely/Never [go to C13]
2. Once every 2 weeks
3. Once a week
4. A few times per week
5. Everyday

C10. Last month, how often did you buy the types of food products and supplements:
1. Never, 2. Rarely, 3. Often, 4. Always
1. Organic
2. Zero-mile
3. Weight-loss pills, teas and products - slim fast, weight watchers, meal replacements
4. Dietary supplements - vitamins, iron, potassium…
5. Frozen items
6. Allergen-free products - gluten free, lactose free
7. Ready meals - to be just heated or defrosted in microwave/oven

C11. How much time do you spend shopping for your food groceries? Do not include the time to get to and from the store.
1. Little time, I shop as quickly as possible.
2. Time enough to find all I need.
3. More time than the strictly necessary.

C12. How often did you shop at the following super/markets last month?
1. Never, 2. Rarely, 3. Often, 4. Always, 5. No nearby shops
1. Specialised food shops (fishery, butchery, bakery, fruit and vegetable shops)
2. Organic Shops
3. Supermarkets
4. Discount supermarket
5. Street markets

SPORTS AND PHYSICAL ACTIVITIES

D01. Beyond walking about, do you engage in other physical activities?
1. Yes
2. No

D02. Have you been physically active on a regular basis in the last year or so?
1. Yes
2. No
[If D01=No and D02=No go to F01]

D03. During the last year or so, how often have you done the following types of sport activities?
1. Not at all; 2. Less than once a week; 3. At least once a week; 4. Almost daily.
1. Cardio/fitness activities like swimming, running, jogging, stair climbing, cycling or rope skipping
2. Yoga, stretching and fitness dancing activities like aerobics, dance exercise, Pilates
3. Water sports like skiing, snowboarding, wakeboarding, diving, canoeing or rowing
4. Weightlifting and resistance training including free weights, bench press, leg press, push ups, pull ups or sit ups
5. Team sports like soccer, basketball, hockey, baseball, and volleyball
6. Boxing and martial arts like judo, karate and taekwondo
7. Racket sports such as tennis, ping pong, and squash
8. Outdoor recreational sports like climbing, hill trekking, walking, mountain biking, orienteering, skateboarding

D04. How often do you do physical exercise?
1. Every few weeks or less
2. Once or twice a week
3. Three to five days a week
4. Six to seven days a week

D05. How often do you exercise…
1. Never, 2. Seldom, 3. Sometimes, 4. Often, 5. Always
1. … alone?
2. … with Friends, family members?
3. … with Trainer, a group or sport team?

D06. When exercising, which of the following devices do you use? (Multiple choice)
1. Wearable fitness trackers
2. Smartwatches
3. Smartphone fitness apps
4. Headphones
5. None
6. Other, please specify: _____

D07. Read the following statements and indicate how often you do the following:
1. Never/Rarely, 2. Occasionally, 3. Often, 4. Always
1. Look for fitness information on the Internet
2. Read specialised magazines about sports and physical activities
3. Ask fitness trainers for advice on how to improve your workout routines
4. Talk with sporty people about training routines and sports equipment
5. Use Apps for fitness information

MECHANISM MEASURES

F01. Have you given your time to help in any of the following ways outside of school or college hours in the last three months?
1. Yes, 2. No
1. …Helped out at a local club, group, organization or place of worship
2. …Helped out other organizations
3. …Raised money for charity (including taking part in a sponsored event)

4. …Contacted someone (e.g., council, media, school) about something affecting your local area
5. …Organized a petition or event to support a local or national issue
6. …Done something to help other people, or to improve a local area

F02. Now, think about people you know who you would feel happy getting in touch with to ask for advice or a favour. How many are…
1. None, 2. Almost none, 3. Someone, 4. Many
1. … from a different school or college to you?
2. … from a different ethnicity to you?
3. … from a different religious background to you?
4. … from a richer or poorer background to you?
5. … of a different sexual orientation than yours?

PSYCHOSOCIAL PROFILE

G01. Below is a brief description of some people. Please read each description and tell us how much each person is or is not like you. Use this scale for your answer:
1. Very much like me; 2. Like me; 3. Somewhat like me; 4. A little like me; 5. Not like me; 6. Not like me at all; 7. Prefer not to say; 8. Don't know
The items must be expressed for men, women and non-binary (for LSE)
1. Thinking up new ideas and being creative is important to them. They like to do things in their own original way
2. It is important to them to be rich. They want to have a lot of money and expensive things
3. They think it is important that every person in the world be treated equally. They want justice for everybody, even for people they don't know.
4. It's very important to them to show their abilities. They want people to admire what he does
5. It is important to them to live in secure surroundings. They avoid anything that might endanger their safety
6. They think it is important to do lots of different things in life. They always look for new things to try
7. They believe that people should do what they're told. They think people should follow rules at all times, even when no-one is watching
8. It is important to them to listen to people who are different from them. Even when he disagrees with them, they still want to understand them
9. They think it's important not to ask for more than what you have. They believe that people should be satisfied with what they have
10. They seek every chance he can to have fun. It is important to them to do things that give them pleasure
11. It is important to them to make their own decisions about what he does. They like to be free to plan and to choose their activities for themself
12. It's very important to them to help the people around them. They want to care for other people
13. Being very successful is important to them. They like to impress other people
14. It is very important to them that their country is safe. They think the state must be on watch against threats from within and without
15. They like to take risks. They are always looking for adventures
16. It is important to them always to behave properly. They want to avoid doing to anything people would say is wrong

logic	O	O	O	empathy
You are more:				

17. It is important to them to be in charge and tell others what to do. They want people to do what he says
18. It is important to them to be loyal to their friends. They want to devote themself to people close to them
19. They strongly believe that people should care for nature. Looking after the environment is important to them
20. Religious belief is important to them. They try hard to do what their religion requires
21. It is important to them that things be organized and clean. They do not want things to be a mess
22. They think it is important to be interested in things. They like to be curious and to try to understand all sorts of things
23. They believe all the worlds' people should live in harmony. Promoting peace among all groups in the world is important to them
24. They think it is important to be ambitious. They want to show how capable he is
25. They believe it is best to do things in traditional ways. It is important to them to follow the customs he has learned
26. Enjoying life's pleasures is important to them. They like to 'spoil' themself
27. It is important to them to respond to the needs of others. They try to support those he knows
28. It is important to them to be obedient. They believe he should always show respect to their parents and to older people
29. They want everyone to be treated justly, even people he doesn't know. It is important to them to protect the weak in society
30. They like surprises. It is important to them to have an exciting life
31. They try hard to avoid getting sick. Staying healthy is very important to them
32. Getting ahead in life is important to them. They strive to do better than others
33. Forgiving people who might have wronged them is important to them. They try to see what is good in them and not to hold a grudge
34. It is important to them to be independent. They like to rely on themself
35. Having a stable government is important to them. They are concerned that the social order be protected
36. It is important to them to be polite to other people all the time. They try never to disturb or irritate other expectations
37. They really want to enjoy life. Having a good time is very important to them
38. It is important to them to be humble and modest. They try not to draw to themself
39. They always want to be the one who makes the decisions. They like to be the leader
40. It is important to them to adapt to nature and to fit into it. They believe that people should not change nature

G02. Chose the left or the right circle that better describe yourself. Select the middle circle if both apply equally.

You are more:				
systematic	O	O	O	(casual
You are more:				
talkative	O	O	O	quiet
You prefer things:				
open-ended	O	O	O	planned
You are more:				
questioning	O	O	O	accommodating
You prefer:				

sociable	O	O	O	reserved
Judges should be:				
impartial	O	O	O	merciful
You are more:				
practical	O	O	O	conceptual
You work better:				
pressured	O	O	O	unpressured
You are more:				
sceptical	O	O	O	tolerant
You are more:				
hands-on	O	O	O	theoretical
You are more:				
contained	O	O	O	expressive
You learn better by:				
reading	O	O	O	listening
You prefer the:				
concrete	O	O	O	abstract
You are more:				
methodical	O	O	O	improviser
You prefer:				
routine	O	O	O	variety
You are more:				
truthful	O	O	O	tactful
You prefer:				
fact-finding	O	O	O	speculate
You prefer:				
individuals	O	O	O	groups
You prefer the:				
traditional	O	O	O	novel

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9.1.3. WeNet - Questionnaire i-Log2

WeNet – Questionnaire i-Log2

A01. Do you want to continue the experiment for another two weeks? *
1.   No, I want to end the experiment on **xxxx**
2.   Yes, I want to continue the experiment until **xxxx**

* Payments description

A02. On which of the following smartphone brands have you installed and compiled the app?
1.   Huawei
2.   Wiko
3.   Xiaomi
4.   Samsung
5.   Motorola
6.   Asus
7.   Lenovo
8.   Other: _

A03. Did you experience any difficulties in one of the following moments while using the i-Log app?
1.   I found no difficulty
2.   In finding and downloading the app
3.   During installation
4.   During configuration
5.   In interfacing with the logic of the app
6.   Other: _____

A04. [If A03 ≠ 1] Could you tell us what kind of difficulty did you encounter? _____

A05. Were there some situations in which you were unable to place the activity you were carrying out in one of the options proposed by the app questionnaires?
1.   Yes
2.   No

A06. [If A05 = 1] What activities could you not place? _____

A07. Which of the following components would you like to see implemented?
1.   Presence of a greater number of hours for the "Sleep" option
2.   Introduction of pop ups that explain the content of the answer options
3.   Presence of precompiled combinations (eg: Lesson -> Classroom, university laboratory -> Classmates)
4.   Introduction of daily feedback on the number of completed questionnaires
5.   Introduction of feedback on the progress of the compilation
6.   Introduction of the possibility to change the background of the app
7.   Other: _____

A09. Other considerations about the experiment _____

B01. Use this scale to evaluate your attitude towards the following statements.
1. Totally disagree, 2, 3, 4, 5. Totally agree
1.   Writing is a natural way for me to express myself.
2.   At school studies in native language or social studies were easier for me than mathematics, physics and chemistry.
3.   I have recently written something that I am especially proud of, or for which I have received recognition.
4.   Metaphors and vivid verbal expressions help me learn efficiently.
5.   At school I was good at mathematics, physics or chemistry.
6.   I can work with and solve complex problems.
7.   Mental arithmetic is easy for me.
8.   I am good at games and problem solving, which require logical thinking.
9.   At school, geometry and various kinds of assignments involving spatial perception were easier for me than solving equations.
10.   It is easy for me to conceptualize complex and multidimensional patterns.
11.   I can easily imagine how a landscape looks from a bird's-eye view.
12.   When I read, I form illustrative pictures or designs in my mind.
13.   I am handy.
14.   I can easily do something concrete with my hands (e.g. knitting and woodwork).
15.   I am good at showing how to do something in practice.
16.   I was good at handicrafts at school.
17.   After hearing a tune once or twice I am able to sing or whistle it quite accurately.
18.   When listening to music, I am able to discern instruments or recognize melodies.
19.   I can easily keep the rhythm when drumming a melody.
20.   I notice immediately if a melody is out of tune
21.   Even in strange company, I easily find someone to talk to.
22.   I get alone easily with different types of people.
23.   I make contact easily with other people.
24.   In negotiations and group work, I am able to support the group to find a consensus.
25.   I am able to analyse my own motives and ways of action.
26.   I often think about my own feelings and sentiments and seek reasons for them.
27.   I spend time regularly reflecting on the important issues in life.
28.   I like to read psychological or philosophical literature to increase my self-knowledge.
29.   I enjoy the beauty and experiences related to nature.
30.   Protecting the nature is important to me.
31.   I pay attention to my consumption habits in order to protect environment.
32.   In midst of busy everyday life, I find it important to contemplate.
33.   Even ordinary every-day life is full of miraculous things.
34.   I often reflect on the meaning of life.
35.   It is important to me to share a quiet moment with others.

C01. As a last question we would like to ask you about your Body Mass Index (BMI). This is a standard measure used in health studies related to nutrition.
Do you agree to answer?
1.   Yes

2. No

C02. What is your BMI level?
[Use the formula BMI = mass/(height x height) to calculate your BMI, where mass should be in kilograms and height should be in meters. Example: if your height is 1.6m and your weight is 52kg, your BMI would be 52/(1.6x1.6)=20.3.]
1. BMI < 18.5
2. BMI in range [18.5 – 24.9]
3. BMI in range [25.0 - 29.9]
4. BMI > 30.0

INVITATION

D01. In the coming months the WeNet team will continue its data collection and App testing activities. We would like to ask if we can contact you to participate in these activities. Your consent does not imply any obligation on your part, and you can decline the invitation at any time.
1. Yes, I agree to be contacted to participate in other data collection and App testing activities
2. No, I am not interested in continuing to participate in other App testing and data collection activities

9.2. I-log

9.2.1. WP7_Sensor_Data_Collection

Morning ITEMS [Morning 08:00]

A1. How would you rate your sleep quality last night?
1. 😃 very good
2. 🙂 fairly good
3. 😐
4. 🙁 fairly bad
5. ☹️ very bad

A2. How do you expect your day to be?
1. 😃
2. 🙂
3. 😐
4. 🙁
5. ☹️

Evening ITEMS [Evening 10:00 pm]

A7. How was your day?
1. 😃
2. 🙂
3. 😐
4. 🙁
5. ☹️

A8. Did you have any problem at [college (weekdays)] today?
Yes
No

A9. What was the problem you had?

A10. Were you able to solve the problem (alone or with help of someone)?

A11. Is there anything that you would have liked to do today that was not possible because of the Covid-19 virus?

Tab 1. Time Diaries (every half an hour questions)

A3. What are you doing?

1. Sleeping
2. Personal care
3. Eating (go to A3c)
4. Cooking, Food preparation & management
5. Study/work group
6. Lecture/seminar/conference/university meeting
7. Did not do anything special (Just let the time pass, Lazed around, etc.)
8. Rest/nap
9. Break (coffee, cigarette, drink, etc.)
10. Walking
11. Travelling (go to A3a1, a2)
12. Social life (Socialising, visiting, receiving, conversating with family, relatives, friends, classmate, visitors, neighbour, and others)
13. Happy Hour/Drinking/Party
14. Phone/Video calling; Skype/Zoom/WhatsApp/Messenger or other VoIP
15. In chat on Internet or reading, sending e-mail
16. Surfed or seeking, reading information via Internet
17. Social media (Facebook Instagram etc.)
18. Watching TV, video, YouTube, etc.
19. Listening to music
20. Reading a book, periodicals, news, etc.
21. Movie Theatre Concert ...
22. Entertainment Exhibit, and Culture (Art exhibitions and museums, Historical place, Cathedral, etc.)
23. Others Entertainment and Culture (Consumer/Sports events)
24. Arts (visual, performing, literary, paintings, photography, singing, acting, playing)
25. Hobbies (assembling/repair apparatus/pc, gardening, etc.)
26. Games (Computer games, parlour games, gambling, etc.)
27. Free Time Study (e.g. piano lesson, artistic courses - painting, music, etc.)
28. Sport (go to A3b)
29. Voluntary work, and participatory activities (social, political, religious, sports, etc.)
30. Household and family care
31. Grocery Shopping
32. Other Shopping
33. Work
34. Other

A3c. Select the main food & drink you ate [MULTIPLE CHOICES]
- Bread, steamed buns and/or breakfast cereals
- Rice, potatoes, beans, pasta, noodles, dumplings, etc.
- Vegetables
- Fruits
- Meat
- Fish
- Processed meat (ham, bacon, sausages)
- Dairy products (Plain or low-fat milk, yoghurt, cheese)
- Soya-based food (milk, yoghurt, tofu)

- Pastries and sweets
- Snack/sandwiches (chips…)
- Water
- Soda
- Coffee/tea or similar
- Others non-alcoholic drink
- Beer
- Wine
- Spirit
- Others alcoholic drink
- Other food

A3a1.And you travel to/from or related to:
- study
- social life
- shopping and services
- other leisure
- work
- changing locality
- other or unspecified travel purpose

A3a2. How are you moving?
- on foot
- by bike
- by bus/tram
- by metro/subway/underground
- by train
- by e-scooter
- by car
- by car as passenger
- by car sharing
- by moped, motorbike
- by moped, motorbike as passenger
- by motorboat
- by airplane
- by taxi/Uber
- other private transport mode
- other public transport mode

A3b What kind of sports activity?
- Walking, Trekking, and hiking
- Jogging and running
- Cycling, skiing, and skating
- Ball games
- Gymnastics and fitness
- Water sports

- Other or unspecified sports or indoor activities
- Other or unspecified sports or outdoor activities
- Productive exercise (e.g. hunting, fishing, picking berries, mushrooms, or herbs)

A4. Where are you?

1. Home apartment /room
2. Home garden/patio/courtyard
3. Relatives Home
4. House (friends others)
5. Classroom/ Laboratory
6. Classroom / Study hall
7. University Library
8. Other university place
9. Canteen
10. Other Library
11. Gym, swimming pool, Sports centre …
12. Grocery Shop
13. Supermarket …
14. Street markets
15. Shops, shopping centres, indoor markets, other shops
16. Café, pub, bar
17. Restaurant, pizzeria, Street food vendor
18. Movie Theatre Museum …
19. In the street
20. Public Park/Garden
21. Countryside/mountain/hill/beach
22. Workplace/office
23. Weekend home or holiday apartment
24. Hotel, guesthouse, camping site
25. Another indoor place
26. Another outdoor place

A5. With whom are you?

1. Alone
2. Friend(s)
3. Relative(s)
4. Classmate(s)
5. Roommate(s)
6. Colleague(s)
7. Partner
8. Other

A6a. What is your mood?

1. 🙂
2. 🙂
3. 😐
4. 🙁
5. 🙁

A6b. In the last two hours did you have any snacks or drinks (except breakfast, lunch, and dinner). (A6b is administered at 10;12;15;17;19;22;24;02;04;06) [MULTIPLE CHOICES]
- No
- Yes, between now and 30 minutes ago (go to 6c)
- Yes, between 0.5 and 1 hour ago (go to 6c)
- Yes, between 1 and 1.5 hours ago (go to 6c)
- Yes, between 1.5 and 2 hours ago (go to 6c)

6c. Select the food & drink taken as snack. If you had more than one snack in the last two hours, only focus on the most recent one. [MULTIPLE CHOICES]

1. Confectionery (Candy, Chocolate, etc)
2. Cookies, cakes, and pastries
3. Bars (Energy bar, etc.)
4. Crackers/biscuits
5. Seeds, nuts, grains, legumes
6. Savory snacks (Chips, Tapas, Pizza, Nachos, Snack mix, deep frying)
7. Sandwiches (Sandwich, Hamburgers, Hot dogs, Bagel)
8. Frozen (Ice cream, Milkshake, etc.)
9. Bread, steamed buns and/or breakfast cereals
10. Rice, potatoes, beans, pasta, noodles, dumplings, etc.
11. Vegetables
12. Fruits
13. Dairy products (milk, yoghurt, cheese)
14. Soya-based food (milk, yoghurt, tofu)
15. Meat
16. Fish
17. Processed meat (ham, bacon, sausages)
18. Water
19. Soda
20. Coffee/tea or similar
21. Others non-alcoholic drink
22. Beer
23. Wine
24. Spirit
25. Others alcoholic drink
26. Other food

SENSORS – FREQUENCY AND VALUES

Tab 2. Sensors and frequency.

id	Sensor	Estimated Frequency
1	Accelerometer	up to 20 times per second
2	Linear Acceleration	up to 20 times per second
3	Gyroscope	up to 20 times per second
4	Gravity	up to 20 times per second
5	Rotation Vector	up to 20 times per second
6	Magnetic Field	up to 20 times per second
7	Orientation	up to 20 times per second
8	Ambient Temperature	up to 20 times per second
9	Pressure	up to 20 times per second
10	Relative Humidity	up to 20 times per second
11	Proximity	up to 20 times per second
12	Location	Once every minute
13	WIFI Network Connected to	On change
14	WIFI Networks Available	Once every minute
15	Bluetooth Devices	Once every minute
16	Bluetooth LE (Low Energy) Devices	Once every minute
17	Running Applications	Once every 5 seconds
18	Screen Status [ON/OFF]	On change
19	Airplane Mode [ON/OFF]	On change
20	Battery Charge [ON/OFF]	On change
21	Battery Level	On change
22	Doze Mode [ON/OFF]	On change
23	Headset Status [ON/OFF]	On change
24	Ring mode [Silent/Normal]	On change
25	Music Playback (no track information)	On change
26	Notifications received	On change
27	Touch event	On change
28	Cellular network info	Once every minute
29	Movement Activity	Once every 30 seconds
30	Step Counter	up to 20 times per second
31	Step Detection	On change
32	Light	up to 20 times per second
33	Time Diaries answers	On change
34	Time Diaries confirmation	On change
35	Time Diaries questions	On change

Please note that:

- The iLog frequency configurations are estimated best effort values that every phone handle considering their particular hardware and software specifications.
- The configurations in this table are the recommended estimated configuration.
- The "... every minute" sensors might collect more than 1 data input per try.
- Conditions must be verified in order to collect data from some of the sensors in the list. Conditions can be, but are not limited to, phone configurations (GPS, Bluetooth, Wi-Fi on) or about permissions granted by the user.
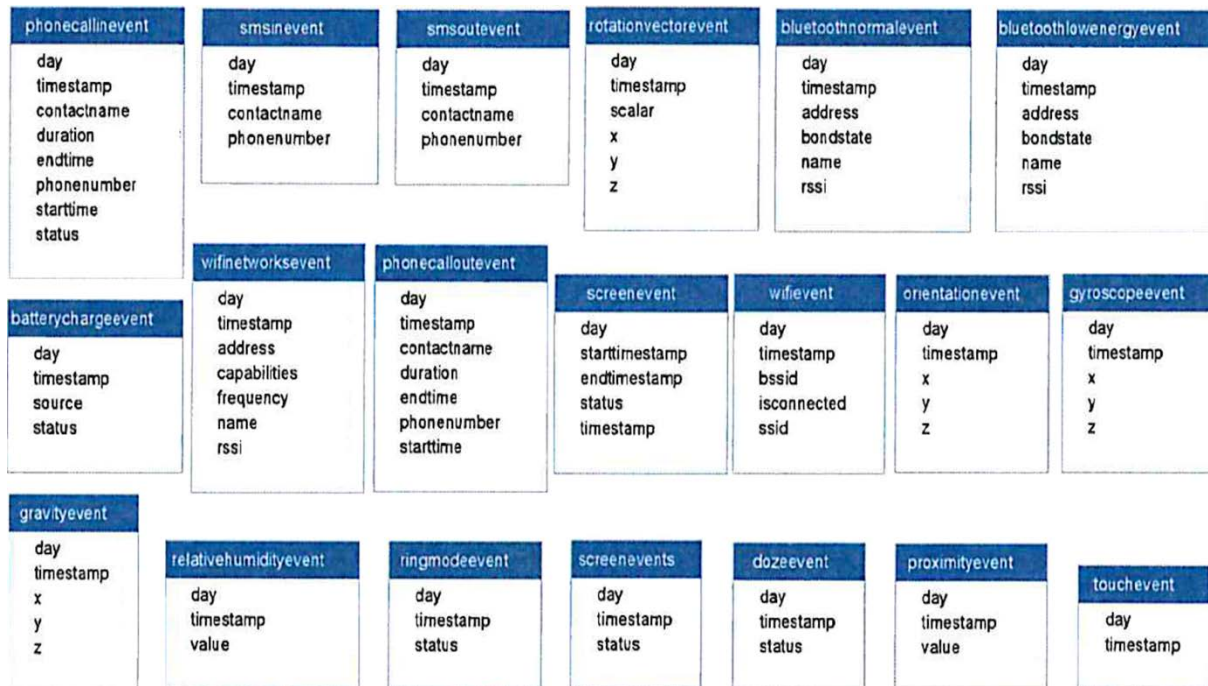
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phonecallinevent
day
timestamp
contactname
duration
endtime
phonenumber
starttime
status

smsinevent
day
timestamp
contactname
phonenumber

smsoutevent
day
timestamp
contactname
phonenumber

rotationvectorevent
day
timestamp
scalar
x
y
z

bluetoothnormalevent
day
timestamp
address
bondstate
name
rssi

bluetoothlowenergyevent
day
timestamp
address
bondstate
name
rssi

batterychargeevent
day
timestamp
source
status

wifinetworksevent
day
timestamp
address
capabilities
frequency
name
rssi

phonecalloutevent
day
timestamp
contactname
duration
endtime
phonenumber
starttime

screenevent
day
starttimestamp
endtimestamp
status
timestamp

wifievent
day
timestamp
bssid
isconnected
ssid

orientationevent
day
timestamp
x
y
z

gyroscopeevent
day
timestamp
x
y
z

gravityevent
day
timestamp
x
y
z

relativehumidityevent
day
timestamp
value

ringmodeevent
day
timestamp
status

screenevents
day
timestamp
status

dozeevent
day
timestamp
status

proximityevent
day
timestamp
value

touchevent
day
timestamp

Fig 1. Sensors and label (examples of information collected)

9.3. Participants information

9.3.1. WeNet_Privacy-Statement

INFORMATION ON THE PROCESSING OF PERSONAL DATA FOR SCIENTIFIC RESEARCH AIMS
(ART. 13 REG. EU 2016/679)

Title of the research project (hereinafter "Project")

_____

Organized by [ ] (hereinafter "Organizer")

_____

Dear participant,

We wish to inform you about our Project aims and the compliance with the current regulation for data processing.

[*Here the local regulation on privacy*]

The Project, which aims to verify *[indicate the research objective]*, is conducted by *[indicate Organizational Unit and Scientific Responsible]*, in collaboration with The Horizon 2020 WeNet project (https://www.we-net.eu). The characteristics of the study and its procedures are described below:

_____
_____

The WeNet Project is held in accordance with the EU Regulation 2016/679 "General Regulation on the protection of personal data" (from now on "GDPR"), the D.lgs. n. 196/2003 "Code regarding the protection of personal data" and the relative Annex A.4 "Code of ethics and good conduct for the processing of personal data for statistical and scientific purposes" (Provision of the Guarantor No. 2 of the June 16, 2004, Official Journal August 14, 2004, No. 190) sanction the right of every person to the protection of personal data concerning you.

Pursuant to the aforementioned legislation, the processing of your personal data by researchers involved in the research activity of the WeNet Project will be based on compliance with the principles set forth in art. 5 of the GDPR and, in particular, to those of legality, correctness, transparency, relevance, not excess and in order to guarantee an adequate security of personal data.

As an interested party, we provide you with the following information regarding the processing of your personal data.

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Data Controller

Data controller _____ e-mail _____

Data Protection Officer_____ e-mail _____

Data Processor_____ e-mail _____

During the project, your data may be processed by external subjects (technical service providers, mail carriers, hosting providers, IT companies, communications agencies) nominated as Data Processors or sub–Data Processors. You can always have an updated list of Data Processors and Sub Data Processors addressing your request by email to the Data Controller.

Purpose of the processing

In general, the processing of your personal data is conducted for research purposes in the field of social sciences and AI. The scientific purposes of this Project are also

_____

This Project is an integral part of the WeNet Project, whose specific objectives concern the understanding of the diversity of individuals to develop a platform that favors social relations through AI systems.

Legal basis of the processing

The processing of your personal data is carried out by the Data Controller in the execution of his tasks of public interest pursuant to art. 6, paragraph 1, lett. e) of the GDPR.

The processing of special categories of personal data (sensitive data) is carried out for the purpose of scientific research pursuant to art. 9, paragraph 2, lett. j) of the GDPR.

Category and type of personal data processed

The data collected and further processed are:

personal characteristics, namely gender/age/department

questions about your (daily) activities/ your location/ mode of transport/ persons being with you/ your mood.

sensor data, specifically acceleration/ gyroscope/ gravity/ rotation vector/ magnetic field/ orientation/ temperature/ atmospheric pressure/ humidity/ proximity/ position/ wifi network connections/ running applications/ screen status, flight mode, battery status, doze modality/ headset, audio mode, music playback (no track info)/ notifications received, touch event/ cellular network info.

[other e.g., course of study, year of course, credits obtained; height, weight; and habits with respect to the social practices typical of the Project themes mentioned above.]

At any time during the data collection, you can stop and start the registering of the sensor data from the sensors, if you wish to do so.

Besides the data above, the email address will also be collected for the sole purpose of managing the data collection. The email address will not be stored jointly with the remaining data collected and will only be linked for the purposes.

Processing methods

Your data will be processed using tools

[*describe the tools used, e.g. paper and / or electronic, etc.*]

The collected personal data and all information related to the abovementioned event are stored on the servers of the Organizer, or external contractors. The operations of which abide by the Organizer's security decisions and provisions for this kind of servers and services, and for servers of external contractors abiding by the necessary security provisions.

Access to the collected personal data and all information related to the above-mentioned event is only possible to the above-described populations through an authentication mechanism.

Your personal data will be processed exclusively by the Owner and / or authorized parties in the framework of the implementation of the Project.

[*If required, specify and describe the automated decision-making process, including profiling, and obtain the relative explicit consent pursuant to art. 22 GDPR*]

Data retention period

Your personal data will be kept until the project's goals are reached. The Project was drafted in accordance with the methodological standards of the disciplinary sector concerned and is deposited with _____ where it will be kept for five years from the planned conclusion of the research.

[*Any storage of personal data beyond the aforementioned term must be justified and verified also in the light of art. 14, paragraph 1, Annex A.4*].

Nature of data provision

The provision of your data for the aforementioned research purposes is indispensable for the carrying out of the Project and does not derive from a regulatory and / or contractual obligation. Failure to provide data will make it impossible to participate in the Project.

Data recipients and possible transfer abroad

In addition to the organizers, the recipients of the data will be the WeNet Project members. The WeNet project includes the collection and processing of personal data, in particular geo-coordinates, sensor data and other data provided by volunteering individuals via Apps installed on smartphone(s), for the purpose of the data collection. The WeNet project is managed by the University of Trento (coordinated by Prof. Giunchiglia).

None of your personal or sensor data will be published on the web or anywhere else.

No personal data is transmitted to parties, which are outside the recipients and the legal framework mentioned.

The collected data will solely serve the purpose of the Project. Your personal data may be communicated anonymously and / or aggregated to the Horizon 2020 WeNet members, that

aims to exploit the diversity of individuals (the different skills) to develop a system that favours social relations through AI systems.

Anonymized data may be disclosed for research purposes by other academic institutions.

[*Any communication of personal data in a non-anonymous form must be justified and verified also in the light of art. 8 Annex A.4*].

[*Also specify if data are transferred to a Third Country or to an international organization and if so indicate the existence of an adequacy decision of the European Commission and / or appropriate safeguards to protect the personal data adopted*].

Dissemination of research results

The dissemination of statistical and / or scientific results (for example through the publication of scientific articles and / or the creation of databases, even with open access methods, participation in conferences, etc.) may only take place anonymously and / or aggregated and in any case in a manner that does not make it identifiable.

Rights of the interested party

As an interested party you have the right to request at any time from the Data Controller the access to your personal data, rectification, integration, cancellation, limitation of the processing that concerns them or to oppose their treatment.

[Optional indications, according to local law

e.g. (Mexico): In the event of a request to cancel your personal data, this will be done within three days of your request.]

For the exercise of the aforementioned rights, you can contact the Data Controller and / or the Data Protection Officer at the aforementioned addresses.

For information relating to the Project, please contact the project's Scientific Coordinator at the following address:

_____

For vision taking in case of paper administration

Date, _____

Signature_____

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9.3.2. WeNet_Informative

INFORMATION ABOUT THE SURVEY

The "WENET: Internet of us" survey collects information on the lifestyles and academic performances of the students at the University of […]. The survey will collect information on the following topics: (a) Study methods and academic participation; (b) Leisure and cultural consumption; (c) Housing choices and Use of mobility systems; (d) Lifestyles. These aspects will make it possible to know in detail useful information to outline the behaviours, habits and attitudes of students in their daily life. This will allow both to improve the knowledge of the student's life and to promote the design of new technological tools and targeted support policies. In order to pursue the aforementioned purposes, the collected information from this survey will be associated with other information relating to your career path (gender, age, department of reference, course of study, year of course, credits earned).

Furthermore, you will have the opportunity to participate in a paid two-week experiment - extendable for another two - which involves the installation of a data collection app on your smartphone, called i-Log.

Considering the first survey, this questionnaire consists of six parts:

1. The habits linked to the management of the university routine, the relationship with one's fellow students and the use of university spaces
2. The housing choice linked to the university path Urban and extra-urban mobility as well as some eco-sustainable behaviours.
3. Lifestyles, including eating styles and body care and physical activity.
4. Free time management during the academic year
5. Cultural consumption
6. The main psycho-social traits

We specify that you always have the right not to answer some questions or to interrupt the compilation. The partially collected data will still be useful for the purpose of the investigation.

At the end of the questionnaire, you will find a section dedicated to consent to participate in the experiment with the i-Log app. The app, once installed on your phone, will send at regular intervals the request to answer four questions that require a few seconds of your time ("Where are you?"; "With whom are you?"; "What are you doing?"; and "What mood are you?"). It will be possible not to respond to notifications at the moment, but to accumulate up to a maximum of 12. After that the app will start to delete them, starting from the least recent.

Furthermore, the app will collect data from your phone's sensors, such as location, accelerometer or if your phone is on or off. For this app experiment there is a 20€ prize for participation in the first 2 weeks of the experiment or 40€ for participation in the entire month. The compensation will be given to all participants who have correctly performed at least 85% of the experiment (both during the first and second two weeks). In addition, there is a random daily drawing of five prizes of 5€ and the final drawing of three prizes of 100€ for those participating in the first two weeks and three prizes of 150€ for those who participate in the whole month, to be selected randomly among those who will have filled out the greatest number of questions.

If you decide to participate in this second survey and agree to be contacted again, you will receive an email with the basic instructions for using the i-Log app and a manual that explains in more detail the project and the app components as well as the rules that you will need to follow to benefit from the expected compensation. Even in this case, we specify that you will always have the right not to answer some questions or to interrupt the compilation. The results of the survey will be disseminated in aggregate form and therefore it will not be possible to trace the subjects to which the data refer.

For information relating to the survey, you can contact the Scientific Director, Prof. Ivano Bison, at the following address: helpdesk[...]@we-net.eu

INFORMATION ON THE PROCESSING OF PERSONAL DATA

We wish to inform you that the current legislation on data protection, with particular regard to the field of research (EU Regulation 2016/679 on the protection of personal data - GDPR, Legislative Decree No. 196/2003 "Code on the subject of protection of personal data" as amended by Legislative Decree 101/2018, the "Rules of ethics for processing for statistical or scientific research" - Order of the Guarantor for the protection of personal data No. 515 of 19 December 2018 and the various provisions of the Guarantor on the subject) establishes the right of every person to the protection of personal data concerning him. In compliance with the aforementioned law, the processing of your personal data in the research project will be based on the respect of the principles set forth in art. 5 of the GDPR and, in particular, lawfulness, correctness, transparency, relevance, non-surplus and in order to guarantee an adequate security of the data.

The Data Controller is the University of […], email: […]

The contact of the Data Protection Officer is: […]

The processing of your personal data is carried out for the realization of the scientific purposes of the research project.

9.3.3. WP7-iLog_participant_flyer

GET IT ON Google Play

i-Log

is a data collection app developed by the DISI and SRS at the University of Trento, within the WeNet project.

Login

The registration procedure involves:

1. The log-in with a personal mail account,
2. The consent to the processing of data,
3. The permission to use the sensors
4. A short profiling procedure.

Try to give as many permits as possible and leave every detection system active. The content of messages, videos, photos, and voice cannot be detected in any way.

Daily questions

Two types of questions are sent every day:

1) a group of 4 closed ended questions every 30 minutes, about your mood, where you are, what you are doing, and with whom you are.
2) 5 questions, two in the morning and three in the evening.
a) In the morning you will be asked how you slept and your expectations for the day;
b) while in the evening you will be asked how it is gone, if you had a university related problem and how did you solve it.

! Is always possible to change answers before submitting the reply.

Although is difficult, the survey is designed to reply every half an hour.
Obviously, this is not always be possible. So, here are some tricks:
1) Is possible to accumulate up to 12 notification, then i-Log will start to delete the oldest.
2) Is possible to interrupt notifications before:

Going to sleep (8hrs)

Attending lesson (2hrs)

Doing sport (2hrs) …

…by clicking on Settings on the i-Log screen.

Please remember…

! before turning of the phone, stop* I-log; otherwise, you will lose the unsaved data
! make sure that Wi-Fi and GPS (position) are always on.
! To save your Giga, data are downloaded only with Wi-Fi connections
! Bring the battery charger with you

For Huawei owners
Huawei phones have an option called protected app that closes app once the screen is turned off. To unable it, go on Settings » Battery » Close app on screen lock.

THE END

Is always possible to verify if all the data are been sent to the server, by push on Settings » Synchronize log.
Is also possible to synchronize data manually.
Once the survey is completed, and all the data uploaded, is sufficient to uninstall the application.

Thank you for your valuable contribution to our research!

Contact us:
helpdesk@wenet.eu

D1.4 FINAL MODEL OF DIVERSITY
THE RESEARCH PROTOCOL OF THE DIVERSITY PILOT STUDY
APPENDIX 2

Revision: v.1.0

Work package	WP 1
Authors	Ivano Bison, Matte Busso, Ronald Abente Chenu, Martina Cvajner, George Gaskell, Marcelo Dario Rodas Britez, Giuseppe Sciortino, Sally Stares, Giuseppe Alessandro Veltri
Reviewers	Fausto Giunchiglia

1. TABLES OF CONTENT

Sommario

2. GDPR DOCUMENTS

1. (WiP)WeNet-NON-EU-Compliance-with-local-laws-template_v1

COMPLIANCE WITH LOCAL PRIVACY LAWS WENET RESEARCH PROJECT

With effect from 1st of January 2020 this declaration is being filled by:

<Institution Name>

<Address>

<Country>

<Fiscal Identifier>

(Hereinafter also referred to as 'the Declaring Party')

Declaration

<Add declaration text>

_____

<Name of the person signing>

Project Partner representative for the country

Place/date <add place and date>

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2. WeNet_Declaration_of_Commitment-template_v0.1

DECLARATION OF COMMITMENT
SUB-TITLE HERE
IF NEEDED/APPROPRIATE

Declaration of commitment to comply with the provisions Ethics Rules for Statistical Treatments or Scientific Research

As part of the Research Project "WeNet - The Internet of US" under EC grant agreement 823783, project's consortium partner carry out research activities that involve processing of personal data.

[specify the type of personal data involved]

- o Personal
- o Particular categories of data (former sensitive data)
    - o Genetic data
    - o Biometric data
    - o Health data
    - o Data on sexual lifestyle or sexual orientation
    - o Data on racial or ethnic origin
    - o Data on political opinions
    - o Data on trade union membership
    - o Data on religious or philosophical convictions

    - o Other

In the course of the Project, all the measures required for the processing of data are taken in order to ensure compliance with the current legislation on personal data protection.

By signing this statement, all those involved in the Project researches comply with the provisions of the Ethics Rules for statistical treatment or scientific research under the WeNet project Ethics and Privacy policy.

This declaration should also be signed up to other parties involved in the continuing research.

This statement will be filed in the WeNet document repository

People involved in the research

Privacy Role	Name	Signature
Data Controller		
Authorized for treatment		
Authorized for treatment		
Authorized for treatment		

Any changes to the composition of the research team that occurred in the following:

Privacy Role	Name	Start Date	Termination Date	Signature
Project responsible				
Authorized for treatment				
Authorized for treatment				

3. WeNet_DPIA-template_v0.1

Document Control

Title	Data Protection Impact Assessment (DPIA): [*insert title*]
Prepared by	
Approved by	
Date of approval	
Review frequency	
Next review date	

Status control				
Version	Date	Status	Prepared by	Reason for Amendment

Part 1: Data protection impact assessment screening

These questions are intended to help you decide whether a DPIA is necessary. Answering 'yes' to any of these questions is an indication that a DPIA would be a useful exercise. You can expand on your answers as the project develops if you need to. You can adapt these questions to align more closely to project you are assessing.

1. Will the project involve the collection of new information about individuals?
2. Will the project compel individuals to provide information about themselves?
3. Will information about individuals be disclosed to organisations or people who have not previously had routine access to the information?
4. Are you using information about individuals for a purpose it is not currently used for, or in a way it is not currently used?
5. Does the project involve you using new technology that might be perceived as being privacy intrusive? For example, the use of biometrics or facial recognition.
6. Will the project result in you making decisions or taking action against individuals in ways that can have a significant impact on them?
7. Is the information about individuals of a kind particularly likely to raise privacy concerns or expectations? For example, health records, criminal records or other information that people would consider to be private.
8. Will the project require you to contact individuals in ways that they may find intrusive?

WeNet project maintains a record of answers to the screening questions in order to document that the decision on whether to carry out a DPIA was properly considered. If after completing the screening questions you decided a DPIA is not necessary you must send a record your answers to the WeNet project management mailbox.

Part 2: Data protection impact assessment report

Use this report template to record the DPIA process and results. You can start to fill in details after the screening questions have identified the need for a DPIA. The template follows the process that is used in the WeNet project. You can adapt the template to allow you to record additional information relevant to the DPIA you are conducting.

1. Step one: Describe the project and identify the need for a DPIA

Explain what the research project aims to achieve, what the benefits will be to WeNet, to individuals and to other parties. You may find it helpful to link to other relevant documents related to the project, for example a project proposal.

It is important to include information about the benefits to be gained from the research project in order to help balance any risk identified in the DPIA. This can help inform decisions on the level of risk to privacy that is acceptable, when balanced against the benefits or other justification for the research project. Also summarize why the need for a DPIA was identified (this can draw on your answers to the screening questions) and identify the legal basis for processing.

2. Step two: Describe the information flows

You should describe the collection, use and deletion of personal data here. You should also say how many individuals are likely to be affected by the research project. Describe how the personal data will be processed. Provide information about the design and method. It is often helpful to include a diagram or flowchart that explains the information flows.

3. Step three: Consultation requirements

Describe the groups you will be consulting with and their interest in the research project. Who should be consulted internally and externally? Explain the method you will use for consultation with any stakeholder groups and how you will communicate the outcomes of the DPIA back to them. How will you carry out the consultation? Explain what you learned from the consultation process and how they shaped your approach to the management of privacy risks. Explain what practical steps you will take to ensure that you identify and address privacy risks. You should link this to the relevant stages of the WeNet operating procedures. You can use consultation at any stage of the DPIA process.

4. Step four: Identify the privacy and related risks

Identify the key privacy risks and the associated compliance and corporate risks (e.g. Data breach, Intruder access, Researchers are not adequately trained, ….). Larger-scale DPIAs might record this information on a more formal risk register.

The questions under Part 3 can be used to help you identify the Data Protection Local law and the General Data Protection Regulation (GDPR) related compliance risks.

	Privacy issue	Risk to individuals	Compliance risk	Associated organisation risk
1				
2				
3				

5. Step five: Identify privacy solutions

Describe the actions you could take to reduce the risks, and any future steps which would be necessary (e.g., the production of new guidance or future security testing for systems).

	Risk	Solution(s)	Result: is the risk eliminated, reduced, or accepted?	Evaluation: is the final impact on individuals after implementing each solution a justified, compliant and proportionate response to the aims of the research project?
1				
2				
3				

6. **Step six: Sign off and record the DPIA outcomes**

Who has approved the privacy risks involved in the research project? What solutions need to be implemented?

Risk	Approved solution	Approved by
The key underlying risks are:	Key solutions are	The research project has been approved by

7. **Step seven: Integrate the DPIA outcomes back into the project plan**

Who is responsible for integrating the DPIA outcomes back into the WeNet project plan and updating any project management paperwork? Who is responsible for implementing the solutions that have been approved? Who is the contact for any privacy concerns that may arise in the future?

Action to be taken	Date for completion of actions	Responsibility for action

Part 3: Linking the DPIA to the data protection principles

Answering these questions during the DPIA process will help you to identify where there is a risk that the research project will fail to comply with the GDPR or other relevant local legislation.

    1. **GDPR Principle 1 (Article 5(1)(a))**

Personal data shall be processed fairly and lawfully and, in particular, shall not be processed unless:

a) at least one of the conditions in DPA Schedule 2 and GDPR Article 6 is met, and

b) in the case of sensitive personal data, at least one of the conditions in DPA Schedule 3 and GDPR Article 9 is also met.

Have you identified the purpose of the project?

How will you tell individuals about the use of their personal data?

Do you need to amend your privacy notices?

Have you established which conditions for processing apply?

If you are relying on consent to process personal data, how will this be collected and what will you do if it is withheld or withdrawn?

If your organisation is subject to the Human Rights Act, you also need to consider:

      Will your actions interfere with the right to privacy under Article 8?

      Have you identified the social need and aims of the project?

      Are your actions a proportionate response to the social need?

    2. **GDPR Principle 2 (Article 5(1)(b))**

Personal data shall be obtained only for one or more specified and lawful purposes, and shall not be further processed in any manner incompatible with that purpose or those purposes.

Does your project plan cover all of the purposes for processing personal data?

Have you identified potential new purposes as the scope of the project expands?

    3. **GDPR Principle 3 (Article 5(1)(c))**

Personal data shall be adequate, relevant and not excessive in relation to the purpose or purposes for which they are processed.

Is the quality of the information good enough for the purposes it is used?

Which personal data could you not use, without compromising the needs of the project?

    4. **GDPR Principle 4 (Article 5(1)(d))– accurate, kept up to date, deletion**

Personal data shall be accurate and, where necessary, kept up to date.

If you are procuring new software does it allow you to amend data when necessary?

How are you ensuring that personal data obtained from individuals or other organisations is accurate?

    5. **GDPR Principle 5 (Article 5(1)(e))**

Personal data processed for any purpose or purposes shall not be kept for longer than necessary for that purpose or those purposes.

What retention periods are suitable for the personal data you will be processing? Are you procuring software that will allow you to delete information in line with your retention periods?

6. **GDPR Articles 12-22**

Personal data shall be processed in accordance with the rights of data subjects under this Act.

Will the systems you are putting in place allow you to respond to subject access requests more easily?

If the project involves marketing, have you got a procedure for individuals to opt out of their information being used for that purpose?

7. **GDPR Principle 6 (Article 5 (1)(f))**

Appropriate technical and organisational measures shall be taken against unauthorised or unlawful processing of personal data and against accidental loss or destruction of, or damage to, personal data.

Do any new systems provide protection against the security risks you have identified?

What training and instructions are necessary to ensure that staff know how to operate a new system securely?

GDPR Article 24

Personal data shall not be transferred to a country or territory outside the European Economic Area unless that country of territory ensures an adequate level of protection for the rights and freedoms of data subjects in relation to the processing of personal data.

Will the project require you to transfer data outside of the European Economic Area (EEA)?

If you will be making transfers, how will you ensure that the data is adequately protected?

4. WeNet_Ethical-Committee-Application-form-template_V0.1

APPLICATION FORM
APPROVAL OF A
RESEARCH PROTOCOL

Revision: v.1.0

Presentation of the project

Project title

Project Manager (Attach resume)
Other involved researchers, institutions to which they belong, their contact details (Attach synthetic and targeted curricula)
Center of Research Name

1. It requires permission to other organizations (such as hospitals, schools, prisons) for accessing data or involve participants? If Yes, please attach copy of authorization letter
2. Do the manager and the members of the research group, as well as their families, have specific interests in relation to the outcome of the study? (Attach statement)
3. Does the Research Manager have enough time equipment, facilities and staff to conduct THE research? (Attach statement, countersigned by the responsible person of the structure to which it belongs)
4. Are there any procedures that require specific professional skills (e.g. doctor, psychologist, nurse, etc.) in accordance with current legislation? If Yes, specify.

PROJECT DETAILS

Funding entities or sponsors (specify contributions)

Beginning date of the research
Expected Duration (IN MONTHS)
Summary of the research program (possible schematic representation of the Protocol)
Project description:

*   Initial basis and theoretical justification

*   Objectives
*   Proposed investigation method
*   Description of the procedure (attach a copy of the material used and Protocol)
*   References

DETAILS OF THE PARTICIPANTS

1. What types of subjects are taking part in the study?

❏ Students

❑ Adults (older than 18 years and capable of expressing their consent)

❑ Children and teenagers under 18 years

❑ Seniors (over the age of 65 years and able to express their consent)

❑ European Subjects

❑ People with intellectual disability/mental, not able to give its consent

❑ Other people whose ability to express consent may be compromised (Please specify why)

❑ People with physical disability (specify what type)

❑ Institutionalized Subjects (i.e., prisoners, hospital patients, etc.)

❑ Patients and/or customers reported by physicians, psychologists or other categories of professionals

❑ Other people whose ability to express consent may be compromised (Please specify why)

❑ You cannot determine the category of subjects (eg., administration via internet)

....

....

2. Is it possible that some of the subjects are in a position of dependence of the researcher or one of his collaborators, such that it may be assumed that the expression of consent to participate in the study is not completely free or free from all pressure (such as student/Professor, doctor/patient, employee/employer)? If Yes, indicate how you intend to provide to minimize the chance that the subject will feel compelled to take part in the search participants
3. Characteristics for the research (specify any criteria for inclusion/exclusion).
4. How will you spread information and invitations to participate in the research? Provide copies of any flyers or letters to be sent
5. Is it expected some form of incentive for participants in the study?

RISK AND RISK MANAGEMENT
The Research will involve
❑ the use of questionnaires (please attach a copy)
❑ structured or semi-structured interviews (attach a copy of the questions that will be asked; if this is not possible, indicate the topics to be covered)
❑ in depth interviews
❑ focus groups
❑ autobiographical narrations
❑ diary collection (diary keeping)
❑ observation of the behaviour of the subjects without their knowledge
❑ observation of subject behaviour
❑ audio or video recordings of subjects
❑ administration of stimuli, tasks or procedures and recording of behavioural responses, opinions or judgements

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❑ administration of stimuli, tasks or procedures that the subject may find troublesome, stressful, physically or psychologically painful, both during and after the conduct of the study

❑ recording of ocular movements

❑ use of TMS (Transcranial magnetic stimulation)

❑ immersion in virtual reality environments

❑ recording of evoked potential

❑ administration of tests, questionnaires or experimental protocols via the internet (web, e-mail)

❑ use of neuropsychological tests

❑ Neuroimaging techniques (e.g., fMRI)

❑ the implementation of behaviors that could diminish the self-esteem of the subjects, or induce embarrassment, sorrow or depression

❑ procedures for deceiving the subjects

❑ administration of substances or agents (e.g., medicines, alcohol)

❑ collection of tissue samples or human fluids (e.g., blood tests)

❑ participation in clinical trials

❑ other (specify):

Use of an application installed on their smartphone that can collect sensor data…

1. Where research involves the use of procedures which could be stressful or dangerous for participants, describe the nature of the risks and the reasonably expected consequences of the procedures used.
2. Is there a specific insurance policy for additional liability to the University? If Yes, please attach the insurance contract in full copy.
3. How do you plan to deal with any complications or adverse reactions?
4. It is expected that there may be benefits to those taking part in the search? Which ones?

INFORMATION AND CONSENT

Attach a copy of Form and Declaration of consent.

1. Taking into account that the information should be given to all potential participants, in the case of persons not being able to give consent indicate who will be asked to consent instead of the participant and describe this person's role and the reasons
2. If, for the realization of the study, it is not possible to inform participants about the objectives of the study prior to its start; specify the modality in which this information will be later given
3. What methods and procedures will be implemented to reply to questions and clarification requests from the subjects during the study?
4. How will the participants be informed about the possibility of receiving, directly or indirectly, information related to their psycho-physical condition that became available during the research?

ANONYMITY AND CONFIDENTIALITY OF PERSONAL DATA

1. ADD detailed information on how the processing of personal data will be done.
2. How will participants be guaranteed anonymity (e.g., use of identification codes)?
3. When necessary to keep the participant identification data, please specify the reasons for this and how the participants are informed.
4. What security measures are in PLACE TO ensure that data confidentiality is respected?

STORAGE AND SECURITY OF COLLECTED DATA AND RESEARCH RESULTS

1. Who will have access to the collected data and the (intermediate or not) results of the research?

2. For how many years will the collected data be retained after the conclusion of the research?
3. Indicate how the sensitive data will be stored (who is responsible for proper storage and where they will be stored).

5. WeNet-DPA-Data_processor_agreement-template_v1.1

DATA PROCESSOR AGREEMENT
SUB-TITLE HERE
IF NEEDED/APPROPRIATE

Pursuant to art. 28 General Data Protection Regulation (GDPR) and with effect from <date> the following agreement on the processing of personal data has been entered between:

<Institution Name>

<Fiscal Identifier>

<Adress>

<Country>

known herewith as the Data Controller. And

<Institution Name>

<Fiscal Identifier>

<Adress>

<Country>

known herewith as the Data Processor.

1. Definitions and Abbreviations

1. The Data Controller and the Data Processors are collectively known as the Parties

2. The 'Data Processing Agreement' or simply 'Agreement' means the present data processing agreement including any appendices.

3. 'Controller Personal Data' means any Personal Data Processed by the Processor or a Subprocessor on behalf of the Controller pursuant to or in connection with the Agreement

4. The 'General Data Protection Regulation' (GDPR) means Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) with subsequent amendments.

5. The '<Country Privacy Law>' means the <Country>'s supplementary provisions to the regulation on the protection of natural persons in connection with the processing of personal data and the free movement of such data.

6. The 'Data Protection Rules' or 'Data Protection Laws' means the General Data Protection Regulation, the <Country Privacy Law> and any executive orders issued in accordance with the General Data Protection Regulation and the <Country Privacy Law>, case law, as well as decisions made by the <Country> Data Protection Agency.

7. 'Sub-processor(s)' are the (sub-)processor(s) to whom the Data Processor delegates one or more of the tasks or derived tasks which the Data Controller has asked the Data Processor to perform.

A 'Third Country' means a country or a state that is not a member of the European Union (EU), and which has not acceded to the agreement with the EU concerning the European Economic Area

2. Purpose of the Agreement

1. This document specifies the Parties' obligations under the Data Protection Rules in connection with the conduct of the research project 'WeNet'.

8. The Controller wishes to subcontract certain Services, which imply the processing of persona (the so-called European Economic Area countries).

9. 'General Agreement' means any cooperation agreement concluded by the Parties, and which regulates the Parties' cooperation; including e.g. conditions regarding publication, governing law etc.

Note that, unless stated explicitly below, the definition and terms used (for example "Commission", "Controller", "Data Subject", "Member State", "Personal Data", "Personal Data Breach", "Processing" and "Supervisory Authority" etc.) in this document have the same meaning ascribed to them in the Data Protection Rules and their cognate terms shall be construed accordingly.

2. I data, to the Data Processor.
3. The Parties seek to implement a data processing agreement that complies with the requirements of the current legal framework in relation to data processing and with the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).
4. The Parties wish to lay down their rights and obligations.

3. Data Controller Processing Instructions

1. This section represents the instructions that the Data Controller provides to instruct the Data Processor on the handling of Personal Data according to European Law and <country> Privacy Law. Any changes to the instructions must be agreed in writing.
2. The Data Controller's instructions to the Data Processor are specified in the following subclauses:

   2.1. *Purpose of the data collection*: the data collected through the survey and the mobile application in the different pilots will be processed in order to derive a model of diversity that will be used during the project and learned by the machines while using the WeNet application. The data needs to be centrally processed in order to be comparable across pilots and to derive significant results.

   2.2. *Type of processing to be performed by the Data Processor*: the data processor will clean, collect, storage and analyse data. <Add more specific information here depending on the case>

   2.3. *Number of data subjects' data to be processed*: the Data Processor will be processing data up to 4000 subjects <put a higher estimate for bigger experiments>.

   2.4. *Type of data to be processed*: the data collected will be about students' habits. Sex, nationality, age and other general personal data will be also collected but all data will be pseudonymized and/or anonymized before being stored.

   2.5. *Is general personal data (for example: name, address, age, self-published data) to be collected*: Yes.

   2.6. *Is confidential personal data (for example: civil registration number, grades, significant social problems) to be collected*: No.

   2.7. *Is sensitive personal data (for example: health data, race, political opinions) to be collected*: No

   2.8. *Which categories of data subjects are to be processed (Adults or children (aged 0-17 years). Specify if the data subjects are affected by special circumstances, such as physical, mental or cognitive disorders, language*

difficulties, abuse etc.): Bachelor and Master students of AAU campus in <city name>.

2.9. *Who will be processing the data for the Data Processor (for all individuals, please state the full name as well as position or relationship with the Data Processor)*: <Remove one of the following options> <Option 1>The Data Processor will be University of Trento partner of the WeNet project. In particular the person coordinating the activities will be Prof. Ivano Bison from University of Trento<Option 2> The Data Processor will be U-Hopper S.r.l. partner of the WeNet project. In particular the person coordinating the activities will be Daniele Miorandi<EndOption2> <change names as needed>.

2.10. *Specify the time period during which the Data Processor will be processing the data*: The WeNet project will run until December 2022. During the project several of this data collection and processing will be performed. The first one will run from February 2020 to May 2020.

2.11. *Upon completion of the data processing task, what is the Data Processor shall do with the data*: the <Remove one of the following options> <Option1>Data Processor will receive access to the cloud infrastructure where the data has been collected<Option2>Data Processor will provide the cloud infrastructure in order to store the data collected<EndOption2> and will work with this data there without copying or removing data from its original source. At the end of the time needed for this data processing task, the Data Processor will notify the Data Controller and lose access to the data.

2.12. <Insert here other instructions related to the Country privacy Law if they differ from the general European Directives>

4. Data Processor Obligations

1. The Data Processor undertakes to comply with the Data Protection Rules. To do so, among other things, the Data Processor must (list not exhaustive):

    1.1. Process personal data in accordance with the general principles laid down in Art. 5 of the General Data Protection Regulation.

    1.2. Assist the Data Controller in complying with and protecting the rights of the data subject(s).

    1.3. Prepare a record of processing activities, cf. Art 28(2) of the General Data Protection Regulation.

    2. The Data Processor acts solely on behalf of and on instructions from the Data Controller in connection with the performance of the agreed Project tasks.

3. Upon request, the Data Processor must provide the Data Controller with sufficient information to allow the Data Controller to ensure that appropriate technical and organisational security measures have been implemented. Among other things, this includes information about where the personal data are located, as well as physical access to the personal data, if so required by the Data Controller.

4. The Processor shall take reasonable steps to ensure the reliability of any employee, agent or contractor of any Subprocessor who may have access to the Controller Personal Data, ensuring in each case that access is strictly limited to those individuals who need to know / access the relevant Controller Personal Data, as strictly necessary for the purposes of the Agreement, and to comply with Applicable Laws in the context of that individual's duties to the Subprocessor, ensuring that all such individuals are subject to confidentiality undertakings or professional or statutory obligations of confidentiality

5. The Data Processor must not, except when instructed by the Data Controller, disclose data which has come into the possession of the Data Processor in connection with the performance of the data processing tasks. Moreover, the Data Processor must not use or process this data for their own purposes or for purposes other than those stipulated by the Data Controller. If, in contravention of this agreement, the Data Processor processes data for their own purposes or for purposes other than the purposes stipulated by the Data Controller, an independent legal basis must exist, and the Data Processor will have the independent status of Data Controller for such processing.

6. If the Data Controller finds that an impact assessment must be carried out, cf. Art. 35 of the General Data Protection Regulation, the Data Processor must contribute to carrying out this impact assessment, if so requested by the Data Controller.

7. Taking into account the state of the art, the costs of implementation and the nature, scope, context and purposes of Processing as well as the risk of varying likelihood and severity for the rights and freedoms of natural persons, Processor shall in relation to the Controller Personal Data implement appropriate technical and organizational measures to ensure a level of security appropriate to that risk, including, as appropriate, the measures referred to in Article 32(1) of the GDPR.

8. The Data Processor must implement appropriate technical and organisational security measures, cf. Art. 32 of the General Data Protection Regulation, to protect the personal data against accidental or unlawful destruction, loss or deterioration, and against any unauthorised disclosure, abuse or processing of the personal data in violation of the Data Protection Rules. As a minimum, the Data Processor is obliged to comply with the following security measures:

    8.1. Electronic registration (logging) of all use of personal data. As a minimum, the registration must contain information about time and user access.

    8.2. Systems, including both software and hardware, used in connection with data processing, must be safe to use and updated.

    8.3. Personal data which must be stored and/or transferred electronically must be encrypted.

    8.4. Personal data must be password-protected.

    8.5. Data storage media and prints must be stored in a safe manner, so that they are not accessible to unauthorised persons.

    8.6. The Data Processor must ensure that only staff members with a work-related purpose have access to the personal data.

8.7. It must be ensured that the Data Processor's staff members are trained properly and provided with adequate instructions and guidelines on the processing of personal data. The Data Processor is obliged to ensure that the staff members involved in processing personal data are familiar with the security requirements.

8.8. In connection with the repair and servicing of media containing personal data, and in connection with the discarding of such media, measures must be taken to protect the personal data.

8.9. The above security regulations also apply to the extent that the Data Processor makes use of home or remote workstations.

9. If the Data Processor is to store personal data for a shorter or longer period of time, the Data Processor is obliged to state where the data are stored. The Data Processor must, within a reasonable time, inform the Data Controller of any change of storage location.

9.1. Main storage location to be used is: <main storage location>

9.2. Backup storage location to be used is: <backup storage location>

9.3. Subprocessor storage location to be used is: <subprocessor storage location> <or remove if does not apply>

5. Sub-Processors

1. Any transfer of the personal data on the part of the Data Processor to one or more Sub-processors is subject to prior written consent by the Data Controller.

2. If written consent has been obtained in accordance with the above, it is the responsibility of the Data Processor to ensure that the Sub-processors comply with the Data Processing Agreement. The Data Processor must have concluded data processing agreements with any Sub-processors on terms similar to the terms set out in the present Data Processing Agreement, and must generally ensure compliance with Art. 28(2) and (4) of the General Data Protection Regulation.

3. At the request of the Data Controller, the Data Processor must supply a copy of the sub-processor agreement(s).

6. Confidentiality and Secrecy

1. Each Party must keep this Agreement and information it receives about the other Party and its business in connection with this Agreement confidential and must not use or disclose that confidential information without the prior written consent of the other Party except to the extent that: (a) disclosure is required by law; (b) the relevant information is already in the public domain.

2. The Data Processor must keep the personal data confidential, and is thus only entitled to use the personal data as part of the fulfilment of the Data Processor's obligations under the Data Processing Agreement.

3. In connection with the processing of personal data, the Data Processor's staff members, business partners, external consultants, temporary staff etc. are all subject to the duty of secrecy and confidentiality that protects the processed personal data.

4. The Data Processor and any Sub-processors are obliged to inform their own staff members, business partners, external consultants, temporary staff etc. about the duty of secrecy.

5. The Data Processor's obligations to maintain secrecy and confidentiality also apply after termination of the agreement.

7. Data Transfer Abroad

1. The Data Processor must not process the personal data outside Europe without the prior written consent of the Data Controller.

2. If written consent has been obtained from the Data Controller in accordance with the above, the Data Processor must ensure that, if the Data Processor or any Sub-processors, cf. section 5 above, perform data processing in another country, the Data Processor and any Sub-processors must, in addition to the Data Protection Rules, comply with all applicable rules in the country in question.

3. If the Data Processor, subject to prior written consent from the Data Controller, performs data processing in a Third Country, the Data Processor must ensure compliance with the rules set out in the General Data Protection Regulation, Chapter V (Art. 44-50).

4. Notwithstanding clauses 7.1-7.3 above, according to Art. 28 of the General Data Protection Regulation, the Data Processor may transfer the personal data to a Third Country if required under EU law or other national legislation. The Data Processor is obliged to inform the Data Controller's technical and administrative contact, cf. section 12, in reasonable time prior to the data transfer.

8. Auditing, Control, Supervision and Subject Rights

1. In the event that the Data Controller, including an external consultant/representative and/or relevant public authorities, wants to carry out an inspection of the above-mentioned measures, the Data Processor is obliged – subject to a reasonable notice – to make themselves available for such inspection.

2. Supervision and control can be carried out by the Data Controller requesting that the Data Processor fill in and submit a checklist to the Data Controller's technical and administrative contact, cf. section 12. The Data Processor must fill in the checklist in connection with the conclusion of the Data Processing Agreement, and subsequently, the Data Controller may request that the Data Processor fill in the checklist every 12 months, or every six months, as deemed necessary by the Data Controller, e.g. due to the particular sensitivity of the data. Notwithstanding the above, in case of breaches of confidentiality or

similar deviations from the Data Processing Agreement, the Data Processor is obliged to fill in the checklist without undue delay, if so requested by the Data Controller.

3. The Processor shall assist the Controller by implementing appropriate technical and organisational measures, insofar as this is possible, for the fulfilment of the Controller obligations, as reasonably understood by Controller, to respond to requests to exercise Data Subject rights under the Data Protection Laws.

9. Notification Duties

1. Without undue delay, the Data Processor is obliged to notify the Data Controller of any deviations from the requirements set out in the Data Processing Agreement, e.g. of:
   ○ any deviations from the instructions given
   ○ any suspected breaches of confidentiality
   ○ any suspected instances of abuse, loss or deterioration of data
   ○ any accidental or unauthorised disclosure of or access to the personal data processed under this Data Processing Agreement

2. All notices and communications given under this Agreement must be in writing and will be delivered personally, sent by post or sent by email and must be addressed to the Data Controller's technical and administrative contact, cf. section12

3. In the event of serious data protection breaches or similar serious inadvertent incidents, the Data Processor must immediately take appropriate steps to stop the breach/incident, and, if relevant, take measures to mitigate the potential adverse effects. If the data protection breach or inadvertent incident is likely to entail a high risk to the rights and freedoms of the data subjects, the Data Processor must inform the data subjects of the breach/incident in accordance with Art. 34(1) and (2) of the General Data Protection Regulation.

4. In case of serious data protection breaches or similar serious inadvertent incidents, the Data Processor must, at the request of the Data Controller, without undue delay, prepare a written statement in accordance with Art. 33(3) of the General Data Protection Regulation.

10. Data Preservation and Deletion

1. The Data Processor undertakes to ensure that the personal data be returned or deleted when the processing activities described in the instructions in clause 3.2 of the Data Processing Agreement terminate. The Data Processor is entitled, however, to store personal data, if required to do so pursuant to EU law or national law, cf. Art. 28(3)(g) of the General Data Protection Regulation.

2. The Data Controller is obliged to specify whether the Data Processor is to delete or return the personal data, and the Data Controller is obliged to provide this information in writing to the Data Processor's contact,

cf. section 12, at least four weeks before the time at which the Data Processor's handling of the personal data is due to cease, cf. the instructions in clause 3.2.

3. If the personal data are to be returned, the Data Controller must, no later than two weeks before the date of return, designate a method therefor. In the event that the personal data are to be deleted, the Data Processor must describe the intended method of deletion no later than two weeks before the data processing is due to cease. If the Data Controller finds that the method is not sufficiently effective, this must be reported to the Data Processor no later than two weeks upon receipt of the description, and the Data Controller must inform the Data Processor of a method which is considered to be sufficiently effective.

4. Upon the request of the Data Controller, the Data Processor must submit a written declaration stating that the personal data have been deleted as agreed, including a description of the method used.

5. If the Data Controller does not stipulate whether the personal data must be deleted or returned, the Data Processor is entitled, at the time at which processing must cease, cf. clause 3.2 of the instructions, to send a description of how the Data Processor intends to delete the personal data to the Data Controller's technical and administrative contact, cf. section 12, and if the Data Controller fails to respond within four weeks, the Data Processor is entitled and obliged to delete the personal data in accordance with the described manner.

11. Liabilities

1. Liability to pay compensation to data subjects: in the event of claims for compensation by data subjects for material or non-material damage, Art. 82 of the General Data Protection Regulation applies.

2. The Parties' mutual liability to pay compensation: The Parties are liable to pay damages under the general rules of Jurisdiction defined in section 12. Except in the case of substantial material breach of the Data Processing Agreement, the Parties will, however, not be held liable for any indirect losses, consequential losses, operational losses, loss of earnings or other financial consequential loss. As an example, though not exhaustive, non-compliance with instructions, cf. section 3, constitutes a substantial material breach.

Except in the case of substantial material breach of Data Controller's instructions, Data processor will not be liable for Country Privacy Law breaches.

Any recourse claims between the Parties arising out of claims for compensation by data subjects are regulated by Art. 82 of the General Data Protection Regulation.

12. Representation and Jurisdiction

1. The following persons will represent the Parties' within the scope of this Data Processing Agreement.

2. Representing the Data Controller
    2.1. Technical responsibility: <Name>, email: <email>, phone: <phone>
    2.2. Administrative responsibility: <Name>, email: <email>, phone: <phone>
3. Representing the Data Processor
    3.1. Technical responsibility: <Name>, email: <email>, phone: <phone>
    3.2. Administrative responsibility: <Name>, email: <email>, phone: <phone>
4. This Agreement is governed by the laws of <country/city>.
5. Any dispute arising in connection with this Agreement, in which the Parties will not be able to resolve amicably, will be submitted to the exclusive jurisdiction of the courts of <country/city>, subject to possible appeal to <country/city>.

13. Start and Termination

1. The date of commencement of the Data Processing Agreement is the date on which it is signed by both Parties.
2. Subject to one month's written notice to the Data Controller, the Data Processor is entitled to terminate the Data Processing Agreement, provided however, that the documentation described above regarding the handling of personal data after termination of the Data Processing Agreement has been received and accepted by the Data Controller.

14. Data Processor Signatures

<Date and Place>

_____   _____

      <Project Participant lead name>   <Institutional lead name>

      <Project Participant lead role>   <Institutional lead role>

15. Data Controller Signatures

<Date and Place>

Co-funded by the Horizon 2020
Framework Programme of the European Union

_____

<Project Participant lead name>   <Institutional lead name>

<Project Participant lead role>   <Institutional lead role>

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Framework Programme of the European Union

3. SURVEY PROTOCOL DOCUMENTS

1. PARTNER SUPPORT

1. WP7_protocol_execution_Start_here_v1.0

Introduction

This document gives a compendium of all the standard documents that are <u>mandatory</u> to use during the preparation, execution and data management of all WeNet prepilots. These activities are organized in four main phases are shown in Figure 1 below.
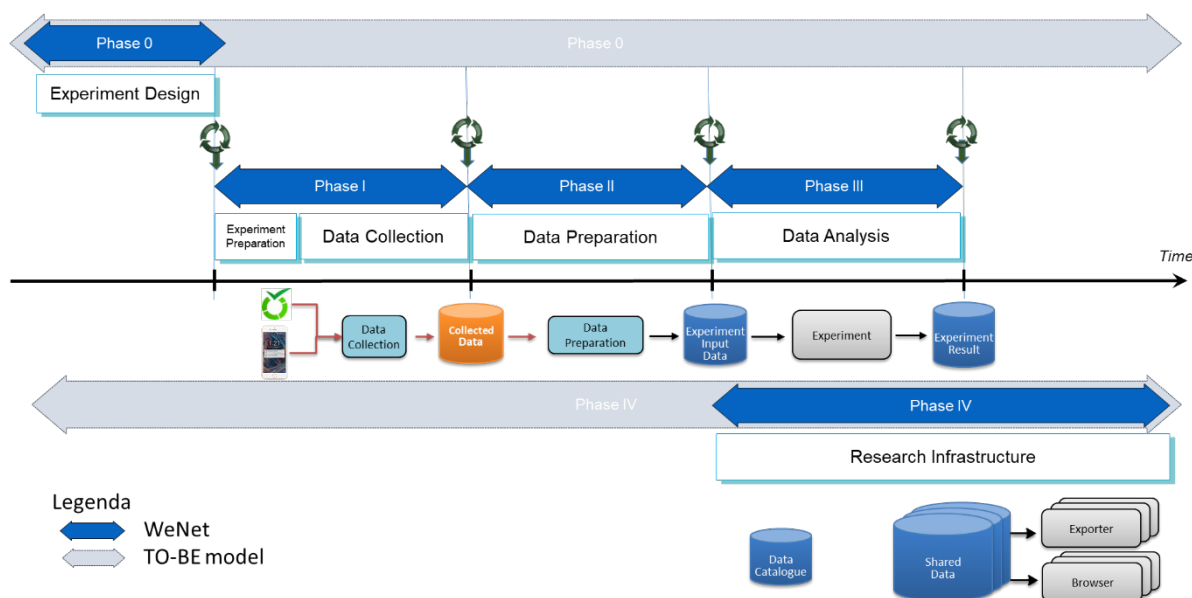
Figure:1 The WeNet prepilot activities and phases

The documents presented here cover all the all the necessary procedures and requirements that were identified as necessary for the correct design, preparation and execution of the prepilots (Phases 0, I and II). Furthermore, it guarantees that the activities of Data Analysis and cataloging within the Research infrastructure (Phases III and IV) can be carried out within the legal and ethical frameworks adopted by the WeNet project.

All the documents to one of the three document types, explained in more detail below:

- <u>Guideline</u>: general document that provides guidelines and the information necessary for the correct execution of the prepilots. This category includes a number of policy-related descriptions and technical documents, all to be considered mandatory for the execution of pilots.
- <u>Procedural aid</u>: provides strongly suggested best practices towards a successful prepilot execution. Contains examples, suggestions and best methods documents.
- <u>Template</u>: provides format and content recommendations for the documents that need to be filled for each instance of a WeNet prepilot. If there are strong reasons for not using the template (for example

institutional rules demand using other local templates), then it is possible to use alternative templates, but it is advised to include similar or equivalent content in the filled document even if not using the default WeNet template. Note that the presence the equivalent instanced and filled document is in most cases <u>mandatory</u> for the execution of the prepilot. Please consult with the appropriate guidelines documents when in doubt.

Finally, documents are presented grouped in three broad categories or tracks: i) Experiment protocol execution track (led by WP7, section 2); ii) Tool operation track (led by WP6, in section 3) Ethics and privacy operating procedure track (lead by WP11, section 4). This separation also makes easier the distribution of the documents to its intended audiences (researchers in the first, technical/operational people in the second and privacy experts or/and lawyers in the third).

2. Experiment protocol execution track

This track is developed within WP7 and in synch with the other two tracks that are developed by WP6 and WP11 respectively. The WP7 track identifies the critical documents and procedures to ensure the correct design, specification and execution for the experiment protocol.

Document Name	Category
Document description	
Document link	
WP7_protocol_execution_Start_here_v1.0	General document
A small text only document with hyperlinks that explains the general content in the experiment protocol execution	
- Current document -	
WP7_introduction_to_experiment_design_v1.0	General document
A document giving general information about what is experiment design using questionnaire and sensor data collection tool inside WeNet	
TBD	
WP7_monitoring_protocol_timeline_template	Template
An activity diagram that contains the specific dates for each of the phases of the monitoring activities, the milestones and the expected deliverables. The document underlines the roles of the different actors	
link_to_monitoring_protocol_template The final version of the outcome documents must be uploaded in the storage folder for the experiment in the WP7 "Smart University pilot design, implementation and evaluation" top-level folder. Each trial/pilot must create a subfolder specific to it and put this document inside.	
WP7_Survey_protocol_timeline_template	Template
An activity diagram that contains the specific dates for each of the phases of the Survey administration activities, the milestones and the expected deliverables. The document underlines the roles of the different actors	
Link_to_Survey_adminstration_protocol_template The final version of the outcome documents must be uploaded in the storage folder for the experiment in the WP7 "Smart University pilot design, implementation and evaluation" top-level folder. Each trial/pilot must create a subfolder specific to it and put this document inside.	

WP7_Survey_Administration_Protocol_template	Template
Main questionnaire and pilot specific configuration information that are needed for the correct administration of the current pilot questionnaire.	
Link_to_Survery_adminstration_protocol_template The final version of the outcome documents must be uploaded in the storage folder for the experiment in the WP7 "Smart University pilot design, implementation and evaluation" top-level folder. Each trial/pilot must create a subfolder specific to it and put this document inside	
WP7_Monitoring_Protocol_template	Template
Pilot specific sensors and questions, frequency information that are needed for the data collection of the current pilot.	
Link_to_Monitoring_protocol_template The final version of the outcome documents must be uploaded in the storage folder for the experiment in the WP7 "Smart University pilot design, implementation and evaluation" top-level folder. Each trial/pilot must create a subfolder specific to it and put this document inside	
WP7_ Data_preparation_activity_description_template	Template
Template document TBD Experiment specific description for the required steps. Data cleaning procedure, data minimization and anonymization algorithms description and codebook.	
TBD The final version of the outcome documents must be uploaded in the storage folder for the experiment in the WP7 "Smart University pilot design, implementation and evaluation" top-level folder. Each trial/pilot must create a subfolder specific to it and put this document inside.	
WP7_ Data_preparation_guideline	Procedural aid
Guidelines and samples.	
TBD	

3. Tools operation track

This track is led by WP6 and identifies the critical documents, procedures and technical details to follow to ensure the integration and consolidation for the methods and tools necessary for deploying and running the experiment.

Document Name	Category
Document description	
Document link	
WP6_Introduction_to_iLog_v1.0	General document
A document giving general information about what is i-Log, and how to use it and configure inside WeNet	
Link_to_introduction_to_iLog	
WP6_Introduction_to_Limesurvey_v1.0	General document
A document giving general information about what is Limesurvey, and how to use it and configure inside WeNet	
Link_to_introduction_to_limeSurveys	
WP6_ i-Log_Infrastructure_architecture _v1.0	General document

A document explaining the technical details related to the i-Log deployment and operation	
TBD.	
WP6_ Limesurvey_architecture _v1.0	General document
A document explaining the technical details related to the LimeSurvey deployment and operation	
TBD.	
WP6_ i-Log Video	Procedural aid
A video introducing i-Log, how to install it and use it	
Link_to_video_directory	
WP6_ i-Log HelpDesk and FAQ database	Procedural aid
A dataset that represents a database of known problems, common issues and questions that may arise when running a pilot with i-Log	
TBD.	
WP6_ Introduction to i-Log slides_v1.0	Procedural aid
A presentation that can be used to present i-Log to the local pilot execution team or participants	
Link_to_iLog_presentation	
WP6_ i-Log_Infrastructure_configuration_template	Template document
Pilot instance specific i-Log configuration, credentials and server names that are needed for the correct running of the current pilot instance	
TBD The final version of the outcome documents must be uploaded in the storage folder for the experiment in the WP7 "Smart University pilot design, implementation and evaluation" top-level folder. Each trial/pilot must create a subfolder specific to it and put this document inside.	
WP6_ Limesurvey_Infrastructure_configuration_template	Template document
Pilot instance specific Lime Surveys configuration, credentials and server names that are needed for the correct running of the current pilot instance	
TBD The final version of the outcome documents must be uploaded in the storage folder for the experiment in the WP7 "Smart University pilot design, implementation and evaluation" top-level folder. Each trial/pilot must create a subfolder specific to it and put this document inside.	

4. Ethics and privacy operating procedure track

This track is led by WP11 and it covers the documentation necessary to correctly declare the experiments in ethical and legal terms towards approval from the relevant authorities, while generating the documents for facilitating eventual ethics or privacy related auditing procedures.

As a recommendation, the partners have to consult an attorney before adopting the ethics and privacy policy to check for any local law implications.

Document Name	Category
Document description	
Document link	
WP11_Ethics-&-Privacy-Operating-Procedure_v1.0	General document
This document describes the mandatory process for handling Ethics and privacy law compliance when performing data collection or processing activities within WeNet project.	
Ethics_and_Privacy_procedure_link	
WP11_WeNet_Code_of_Ethics_v1.0	General document
The purpose of this document is to serve as the guide for WeNet partners on how the research, surveys and experiments from the project will be conducted in compliance with fundamental ethical principles..	
Code_of_ethics_link	
WeNet_Ethical-Committee-Application-Request_template(English version)	Template
Application request in English for the Ethical Committee approval of the research protocol	
Ethical_Committee_Appliation_form_link The final version of the outcome documents must be uploaded in the storage folder for the experiment in the WP7 "Smart University pilot design, implementation and evaluation" top-level folder. Each trial/pilot must create a subfolder specific to it and put this document inside.	
WeNet_Ethical-Committee-Approval	Template
Approval of the research protocol	
Template TBD The final version of the outcome documents must be uploaded in the storage folder for the experiment in the WP7 "Smart University pilot design, implementation and evaluation" top-level folder. Each trial/pilot must create a subfolder specific to it and put this document inside.	
WeNet_DPIA-template_v0.1_draft	Template
Experiment Data Protection Impact Assessment document	
DPIA_template_link The final version of the outcome documents must be uploaded in the storage folder for the experiment in the WP7 "Smart University pilot design, implementation and evaluation" top-level folder. Each trial/pilot must create a subfolder specific to it and put this document inside.	
WeNet_DPIA UNITN Phase 2	Procedural aid
Best practice.	
TBD	
The text used to provide information to the users	Template
Template TBD Informed consent necessary to involve research or study participants in any trial, pilot, experiment or study within WeNet project.	
The final version of the outcome documents must be uploaded in the storage folder for the experiment in the WP7 "Smart University pilot design, implementation and evaluation" top-level folder. Each trial/pilot must create a subfolder specific to it and put this document inside.	

Trace of the informed consent given	Template
Template TBD An information file containing a trace of the informed consent given	
The outcome must be uploaded in the storage.	
Data minimization checks	Template
Summary for the data minimization checks done	
Template TBD The final version of the outcome documents must be uploaded in the storage folder for the experiment in the WP7 "Smart University pilot design, implementation and evaluation" top-level folder. Each trial/pilot must create a subfolder specific to it and put this document inside.	
Data preparation tasks	Template
Summary for the data preparation tasks done with the description for the used algorithms	
Template TBD The final version of the outcome documents must be uploaded in the storage folder for the experiment in the WP7 "Smart University pilot design, implementation and evaluation" top-level folder. Each trial/pilot must create a subfolder specific to it and put this document inside.	
WeNet_Privacy-Informative-template_v0.1_draft	Template
Template to prepare the information regarding the processing of the participant's personal data	
Privacy_informative_template_link The outcome must be uploaded in the storage.	
WeNet_Request_for_Data_Processor-template_v0.1_draft	Template
Template used by the Controller to request the appointment of a Data Processor for a particular task/s and the provision of instructions for the processing of personal data	
Data_Processor_template_link The final version of the outcome documents must be uploaded in the storage folder for the experiment in the WP7 "Smart University pilot design, implementation and evaluation" top-level folder. Each trial/pilot must create a subfolder specific to it and put this document inside.	

2. WP7_Survey_Protocol _Template

Purpose of the Survey Protocol Template

This template is a sample document that helps and gives a step by step guideline and layout to prepare the final "Survey Protocol" document. The predefined structure of the template helps to fill in the required details with precision and accuracy. The writing instruction keeps the important points in check and prompts to write the appropriate content.

The "normal text" is constantly a set of sentences included in the final document with almost small or no need for edit and customize, while "*italic font*" displays the description for the purpose of the paragraph and should be removed in the final document.

The body text displays writing instructions useful for creating the final document and for meeting the goal. The body text should be removed in the final document.

The final document shall not contain this paragraph

INTRODUCTION

Surveys are one of the several way WeNet project gathers input from the large group of participants from different backgrounds. After the design of the questionnaire, WeNet partner administer it via the LimeSurveys tool to participants. Among the others, relevant steps are offering an incentive, effective in generating interested students takers, and introducing the experiment goals and explain to the potential participants how answering the questionnaire.

This document presents the general description of the management protocol for the CAWI Questionnaire in the framework of the WeNet project. It deals with defining the part concerning the management phases of the questionnaire, it is out of the scope the definition of the research process[1] and the in-depth definition of the general and technical specifications of the platform [2].

The questionnaire preparation consists of 6+1 phases, to be done before the administration to the participants. They are:

Questionnaire preparation

customization

translation

loading

sampling strategy

Incentives design

Sending and monitoring mailings

Each of these phases should be followed by a validation process, namely a verification of the correctness of the procedure. Notice that the protocol contains a part of the sampling strategy linked to a second survey since the data from the questionnaire are connected with the subsequent survey carried out with the iLog app. The next paragraphs describe each phase in detail.

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[1] Ref. document "WP7_introduction_to_experiment_design_v1.0"

[2] Ref. document "WP6_ Limesurvey_Infrastructure_configuration"

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QUESTIONNAIRE PREPARATION

[*Optional: this section describes the design of the questionnaire. If the partner is not in charge to design the questionnaire, this section may be absent or contains the simple wording "The questionnaire was designed by the partner XXX in the WP…"*]

This section should be developed by the research group to define in example:

>   The research objective

>   The main concepts to be analyzed

>   Operating procedures (constructs, hypotheses and item selection)

>   The general structure of the questionnaire

CUSTOMIZATION

[*This section describes all the steps taken to adapt the questionnaire to local conditions and research needs. Commented copy of the questionnaire highlighting the changes must be attached.*]

The first step is to observe the contents of the questionnaire, considering the following three aspects:

>   **information** that may come **from other data bases** in the form of a microdata. For example, all the information that can be requested directly to the administrative secretariat of the local department (e.g. age of the students, gender, department of belongings, etc.)

>   the **consistency of the questions** asked for the population being studied. For example, regarding accommodation there are several strategies chosen by the universities: in some cases, all students reside in university dormitories, in others the accommodation can be provided both by the university and by private individuals, etc.

>   **the presence of all the questions** to ask. It is possible to add some questions to the questionnaire, in accordance with the typology of the study population or specific research interests, previously discussed within the Project.

To adapt the questionnaire to specific needs, all the customizations to the questionnaire can be entered directly in the shared file, using the review mode.

After the survey manager authorization, you should insert in this paragraph the description of your changes to outline the functional localization of the questionnaire.

Once the latest version of the questionnaire is validated, you can proceed with the translation step.

Notice. The consistency and validity of the questionnaire depends both on the order in which the questions are asked and on their quality.

TRANSLATION

[*This section describes all the steps taken to translate the questionnaire. A commented copy of the questionnaire highlighting the translations carried out independently, compared to those found in the literature must be attached to the final document.*]

A questionnaire may appear to be a series of banal, perhaps even obvious, questions, and drawing up a questionnaire may seem to be a fairly simple exercise. In reality, however, the formulation of a questionnaire is a difficult and complicated task requiring great effort and careful attention (Corbetta, 2003 pp 129-139). The questionnaire consists of a general structure, which reflects the place and the moment in which to present the various themes (which is already set), and the individual questions, which are the result of constructions and validations by experts. The validation of these questions considers both the structure of the questions themselves and the formulation of the individual sentences. There are numerous errors and distortions that arise from asking the question incorrectly. Given the presence of a questionnaire already developed, here we underline only two types of errors: the lack of understanding and the mystification of meaning. Concerning the former, a question posed with specific terms in some sectors or ways of thinking may not be understandable by everyone. In the same way, a question posed in tendentious terms or with terms that are too dense in meaning, could induce the subject to respond in a way that does not entirely reflect his person.

For the reasons listed above:

Where possible, find an already translated version of the questions. There is a specific psychological and sociological literature on this issue, that you can find in different archives. Here, it is possible to search for the specific name of the scale, or alternatively to copy and paste the entire question and / or the individual items you wish to translate. This method is the one that best guarantees the validity of the questionnaire and must be adopted as a priority[2].

Where it is not possible to find a translation already validated of the questions, it will be necessary to produce one. In order to produce the best translation and guarantee the correctness of the questionnaire, the translation must:

be made by two different people
validated by a third person.

In case of agreement between the three persons and the two translations, the question may be translated. In case of disagreement, it will be necessary to proceed to reflect on the individual parts of the question, identifying the best terms with which to translate it - i.e. those that best reflect the connotations of meaning and culture of the term to be translated.

In order to validate the single questions, or parts or even the entire questionnaire, depending on the translation methods, a first validation process - or pre-test - may take place, it must involve around 50 participants. As for customization, it will be necessary to contact the research manager in order to assess the need for this procedure.

[1]List of the archives:
https://www.jstor.org/
https://apps.webofknowledge.com/WOS_GeneralSearch_input.do?product=WOS&search_mode=GeneralSearch&SID=D4EBx3ebg8kw7KJYqRS&preferencesSaved=
https://scholar.google.com/

[2]Note: this procedure may not be necessary for all questions. In general, a distinction is made between "single item" and "item battery" (namely, aggregates of multiple questions) (see, Corbetta, 2003 pp 129-142). In the first case it

is possible to produce one's own translation, taking care to correctly translate the semantic sphere of the meanings of words (e.g. the term "gender" has not the same meaning of "sex" !!!). it is useful, also in this case, to follow the instructions indicated in point two.

UPLOADING

[*This section describes all the steps taken to load the questionnaire, highlighting whether there have been changes with respect to the structure and logic of the English questionnaire version (eg adding filters or moving questions or groups of questions). If there are no substantial changes, this section may contain the simple wording "Identical to English version"*]

This phase is described in more detail in the document:
WP6_Introduction_to_Limesurvey

The questionnaire must be uploaded on the LimeSurvey (LS) platform.
The usual procedure of WeNet Project foresees that the full English LS version will be provided. The version in the translation language can be added to the English version, by following this procedure:

Copy the questionnaire and rename it (name of the questionnaire_Your University)
How to copy the survey:
https://www.youtube.com/watch?v=UI01hwrsiVk

If it is not already done, customize the part discussed in par 1
How to create a new question:
https://www.youtube.com/watch?v=7134QebOQzY
Note: this is an example with "Array" questions. There are other kind of questions that can be created, following the same procedure proposed in the video.

Translate the questions
How to translate questions:

https://www.youtube.com/watch?v=AwcTvuXmoFg&list=LLoYuffutqm-qcQHOp00A7Jg&index=4&t=72s

Import the list of participants
How to import the list of participants:
https://www.youtube.com/watch?v=QKbGdUC22g0
Note: it is necessary to create the excel spreadsheet compatible list.

It is necessary to validate the uploaded questionnaire. It is good practice to send the questionnaire to a dozen people, who answer the questions and check the actual fluency and correctness of the structure and the grammar of the single questions.

SAMPLING STRATEGY

[*This section describes the sample design, including how to select and the number of participants that you intend to reach, both for sending the questionnaires and for monitoring with the app*]

There are two types of samples: probability and non-probability. Each of them contains a series of different methods of selection and contact with the participants (Corbetta, 2003 pp 210-230). A sample is said to be a probability sample when each unit has non-zero probability of selection; probability of selection for all units is known; and the unit selection is completely random.

During the WeNet project different sampling strategies can be used, depending on the type of research that takes place. In this case, we will take as an example the most typical solution, namely that which involves sending a questionnaire to the student population and extracting a proportional sample of participants for the experiment with the iLog app (described in the document WP7_Sensor_Data_Collection_Protocol).

In general, and given the possibility, in the WeNet Project the solution adopted is to select the entire student population and to send the questionnaire to each of them. This procedure generally guarantees a drastic reduction in the times and costs of administration, guaranteeing in any case that the sample will reach a good number. Although not completely a probability selection strategy, subsequent measurements and weightings guarantee the quality and the representativeness of the sample.

At the end of the questionnaire each of the students will be asked if they wish to participate in the experiment with i-Log.

Among those wishing to participate, a larger sub-population will be selected than the one that will actually be part of the experiment. The population must be proportional to the number of students enrolled in the various departments, so that the sample is as representative as possible.

The reason why more students are selected is the rate of population collapse during the first days of the experiment (some decide not to continue or install the app, others do not have compatible mobile phones, etc.)

INCENTIVES DESIGN

[*This section describes the tangible and intangible incentives chosen to support the data collection campaign, both with the questionnaire and with i-Log.*]

Generally, no incentives are offered for the survey with the questionnaire and material incentives are offered for the survey with the iLog app.

In the event of discrepancies with the procedure of point "4.Sampling Strategy" (namely sending an email to all university students), an incentive plan could be developed for the Questionnaire. The following is an example. An advertising campaign to encourage the compilation would be run before the survey and/or material rewards or reimbursements would be assigned a posteriori.

For the iLog app, three material incentives and one immaterial incentive are proposed.

The three material incentives are:

refund for two weeks (plus two weeks)

extraction of small daily prizes

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draw of three final prizes

The intangible incentive concerns the possibility of obtaining personal information on the management of the daily routine.

SENDING AND MONITORING MAILINGS

[*This section describes how to send the questionnaires and the devices used*]

AFTERTHOUGHTS

[*This section should describe any problems encountered in the implementation of the protocol that are not described in the previous sections and any subsequent measures (for example, choosing to interrupt the sending of reminders by reaching an appropriate number of participants in advance - namely n = 1200)*]

Once the questionnaire has been validated and the address book has been uploaded, it will be possible to proceed with sending the e-mails. Sending must be done in stages and may take several days. The number of submissions per tier varies depending on the server's capabilities. For this reason, the dispatcher should monitor the number of students accessing the questionnaire or, if this is not possible, send invitations with caution.

A best practice is to send an invitation e-mail to complete the questionnaire, and four reminders in a month (one per week) to participants who have not yet completed the questionnaire.

3. WP7-LimeSurvey-data-preparation-instructions

1. Introduction

This document has the step by step data processing procedures that the local partners need to perform at the end of the LimeSurvey data collection.
The main outcomes for these operations are:

- Generation of the Full Datasets that only the Local Partners have access to
- Generation of the Anonymized Datasets that will be uploaded to the research Infrastructure
- Generation of the Selected Participants dataset, that will be used to send the invitations for the participants for the Second Survey and i-Log Data Collection.

R Scripts found in the folder .../Pre-pilot/Pre-pilot_SURVEY PREPARATION/scripts are also provided complementing this document, if you haven't used R before please find resources on how to install and run the scripts here
https://rstudio.com/products/rstudio/download/.
Finally, how to upload Datasets to the WeNet Research Infrastructure will be detailed in a future document.

2. At First Survey's End

The detailed procedure in this section is to be followed when the Lime Survey data collection referred to as "First Survey" is closed (no further answers are being received).
Two datasets will be prepared in order to select the participants who will participate in the next surveys and to create the anonymized dataset to be uploaded in the research infrastructure.
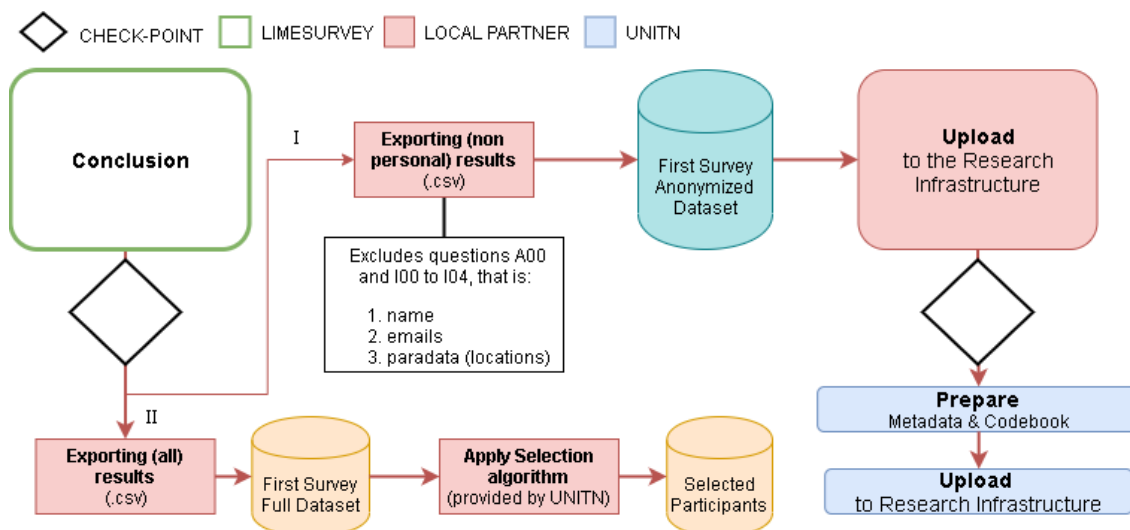
2.1. Generate the Full Dataset

On the toolbar in the main page of the LimeSurvey Questionnaire, click on Responses and select the option Responses & Statistics (Fig. 1).
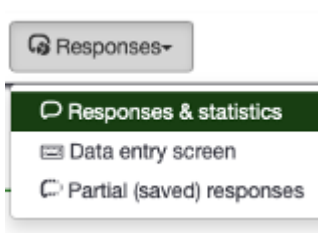
FIGURE 1 RESPONSES

On the toolbar of the opened page, click on Export and select the option Export responses (Fig. 2).
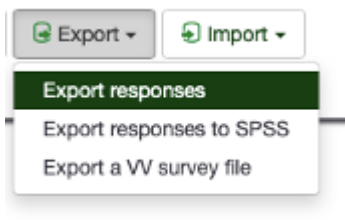
FIGURE 2 EXPORT

On the Export results page, select the following options:

1. Format: CSV (Fig. 3)
2. Headings: Question code (Fig. 3)
3. Responses: Answer code (Fig. 4)
4. Columns: select all the columns (Fig. 5)
5. Token control: All (Fig. 6)

FIGURE 3 FORMAT AND HEADINGS
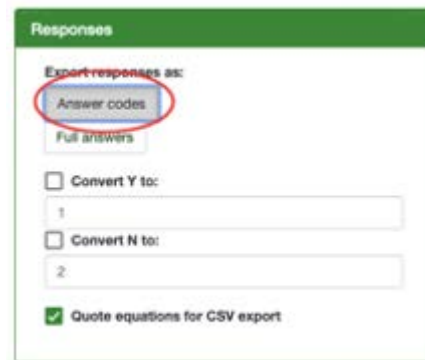
FIGURE 4 RESPONSES
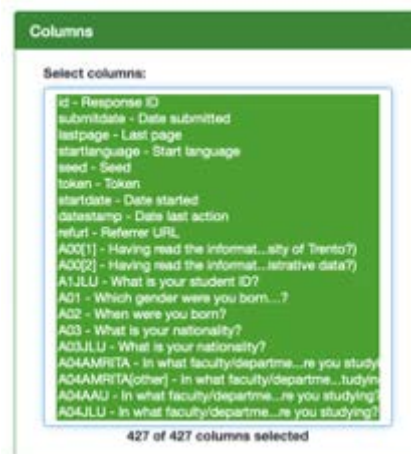
FIGURE 5 COLUMNS

All columns should be selected on this screen.
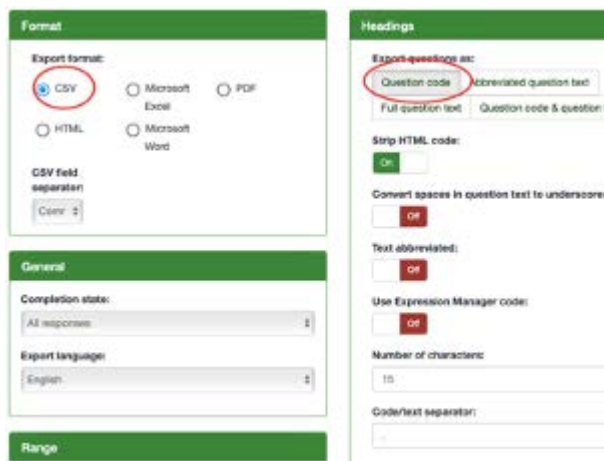
FIGURE 6 TOKEN CONTROL

Finally, click on Export, to export the results (Fig. 7)

FIGURE 7 EXPORT

2.2. Generate the List of Selected Participants

To generate the anonymized dataset, it is necessary to use the R script with the name "participantlist V1.R".
https://drive.google.com/file/d/1kgh8aRGm8za2r6K6-MNbuHPHiUkRvDIv/view?usp=sharing
The script will:

1. Read the .csv dataset generated in 2.1 as an input
2. Select the list of participants according to the survey prerequisites
3. Select a subsample of 350 participants
4. Create a dataset with the information needed to:
   a. Upload the participant list in the LimeSurvey "Second Survey" (WeNet – Questionnaire iLog)
   b. Contact the students
5. Export the data in an excel format

3. i-Log start and Second Survey
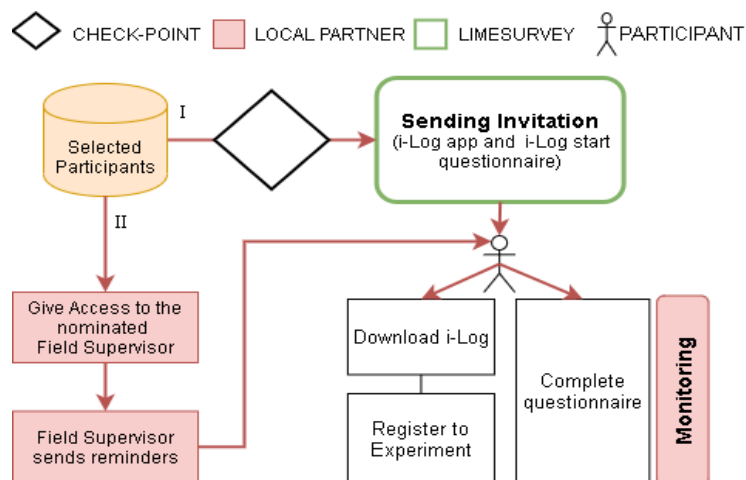
3.1. i-Log Start Survey

In this phase it will be necessary to send two invitations:

1. Invitation to the "Second Survey" (WeNet – Questionnaire iLog)
2. Invitation to i-Log (Email)

To send the LimeSurvey invitation, it will be necessary to:
1. Prepare the participant list
2. Upload the participant list on LimeSurvey
3. Send the invitation

3.2. Invitation to the "Second Survey" (WeNet - Questionnaire i-Log)

Prepare the participant list

To prepare the participant list it is necessary to use the spreadsheet "WP6_Limesurvey_participants_table_iLog.xlsx" (also found in the scripts folder, link below) and the List of selected participants (see 2.3 above for instructions on how to generate this file).
https://drive.google.com/file/d/1k3AgzJNwaM5IHTayYbvCYwo4OwtTNVV1/view?usp=sharing

In this phase will be invited **300** participants, but the List of selected participants contains **350** participants. As defined below, the first invitation will be sent to 300 participants; the remaining 50 participants are substitutes, who will be invited during the first week in case of abandonment of the first participants. In other words, every time one of the 300 participants leaves the survey during the first week, they will be replaced by the first available participant in the list of 50 replacements (until the list is exhausted).

Please make sure to put the List of the selected participants (from 2.3) in the format "WP6_Limesurvey_participants_table_iLog.xlsx". The columns between the two columns correspond as follows:

WP6_Limesurvey_participants_table_iLog.xlsx	Participant list
First Name	firstname
Email	I02.2 (Personal email)*
Token	token
Attribute_1	A01 (Gender)

*In case the I02.2 has empty values, it is possible to use the "email" column. However, these values MUST be completed (by requesting the .gmail address to the participants) by the end of the data collection. The personal email is the key to merge the i-Log results with the LimeSurvey results.
Once prepared the "WP6_Limesurvey_participants_table_iLog.xlsx":

1. copy and paste the COLUMN TO BE COPIED IN THE ASCII EDITOR into a text editor (default text editor for Windows; Atom https://atom.io or similar for MacOS)
2. save the file as a .csv

Upload the participant list

1. On the LimeSurvey questionnaire main page (WeNet – Questionnaire iLog), click on Survey participants
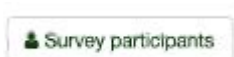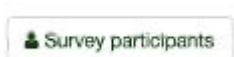

2. Click on Create and select the option CSV file
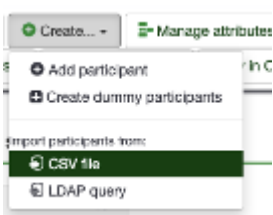
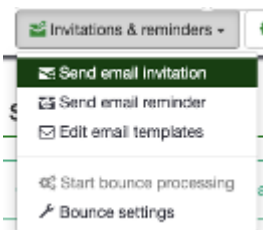3. Upload the participant list (.csv)

Send invitation

1. On the LimeSurvey questionnaire main page, click on Survey participant

2. Click on Invitation & Reminders and select the option Send email Invitation

Remember: send only 300 invitations (3 clicks)
Every time one of the 300 participants leaves the survey during the first week, they will be replaced by the first available participant in the list of 50 replacements (until the list is exhausted). The single invitation can be sent by clicking on the participants name, inside the Display participants page.

3.3. Invitation to i-Log (Email)

For sending the i-Log invitations please take as an input the already prepared participant list discussed in 3.2 "Prepare the participant list".
Invitation will be sent by email from the helpdesk[...]@we-net.eu account.
In this phase we will proceed to invite **300** participants, but the List of selected participants contains **350** participants. As such, initially only send invitations to the first 300 participants; the remaining 50 participants are substitutes, who will be invited during the first week in case of abandonment of the first participants. In other words, every time one of the 300 participants leaves the survey or is unresponsive during the first week, they will be replaced by the first available participant in the list of 50 replacements (until the list is exhausted).
These participants MUST be the same one invited to the Second Survey on LimeSurvey.

3.4. Survey Monitoring

The survey will be monitored:
   1. by replying to student emails
   2. by checking the Response and Statistics, see WP7-LimeSurvey_Reports_TEMPLATE v1

3.5. Closing of the invitations

Once concluded the invitation phase, the spreadsheet "WP6_Limesurvey_participants_table_iLog.xlsx" and the List of selected participants (see par. Above) MUST be updated with:
   1. The list of participants who actually started the survey
   2. The correct personal email list with .gmail domains for each participant

These lists will be used:
   1. to contact participants during the i-Log survey
   2. to load the list of participants in the "Third Survey" I-LOG MIDPOINT SURVEY

4. i-Log midpoint survey
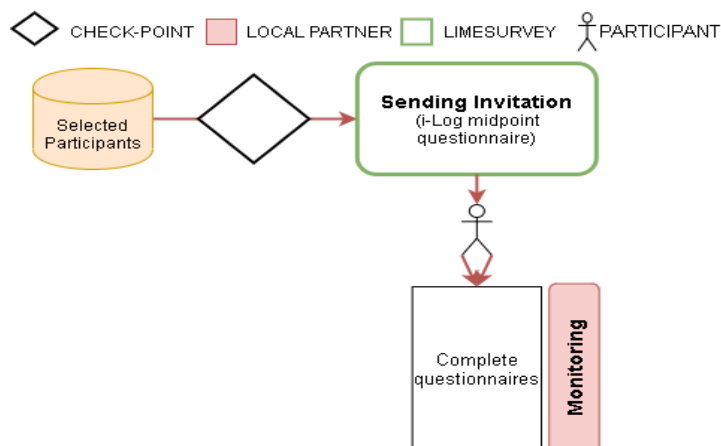
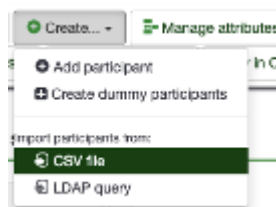## 4.1. Invitation to the "Third Survey" (WeNet - Questionnaire i-Log2)

Upload the participant list

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1. On the LimeSurvey questionnaire main page (WeNet – Questionnaire iLog), click on Survey participants
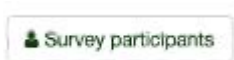
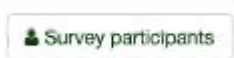2. Click on Create and select the option CSV file
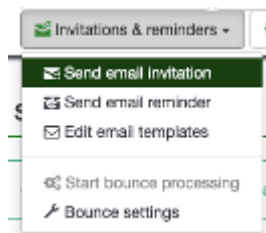

3. Upload the participant list (.csv)

Send invitation

1. On the LimeSurvey questionnaire main page, click on Survey participant

2. Click on Invitation & Reminders and select the option Send email Invitation

4.2. Survey Monitoring

The survey will be monitored:
1. by replying to student emails
2. by checking the Response and Statistics, see WP7-LimeSurvey_Reports_TEMPLATE v1

5. Closing of data collection

Keep this dataset safe in a secure machine until the end of the project

5.1. Generate the Anonymized Dataset for the Second and Third Surveys

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The procedure for generating the anonymized datasets for the second and the third surveys should be simpler, as long as the token from the first survey was loaded into the second and third ones as instructed.

You can proceed to directly download the CSV for the Second and Third Surveys (steps similar to those already explained in 5.1) but you need to exclude the token control fields specified below (Fig. 8).
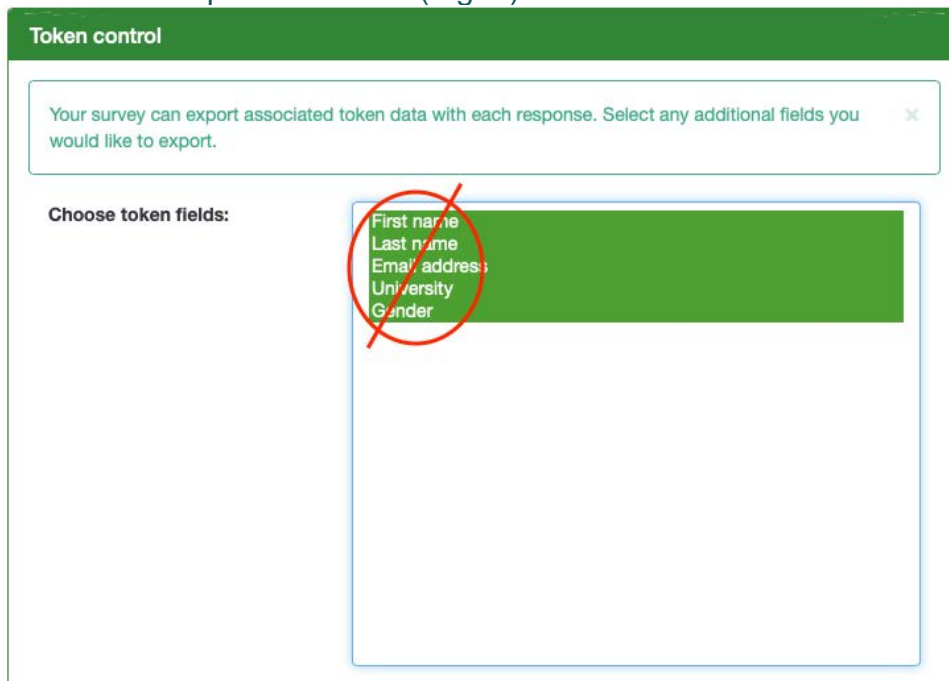

FIGURE 8 EXCLUDE TOKEN CONTROL FIELDS

For the Second survey CSV file please rename it as "**2020-XXX-WeNet-Diversity-Pilot-LS-Survey2-anon.csv**" where 'XXX' is replaced by the two or five characters long abbreviation from your institution (e.g. "2020-UNITN-WeNet-Diversity-Pilot-LS-Survey2-anon.csv").

For the Third survey CSV file please rename it as "**2020-XXX-WeNet-Diversity-Pilot-LS-Survey3-anon.csv**" where 'XXX' is replaced by the two or five characters long abbreviation from your institution (e.g. "2020-UNITN-WeNet-Diversity-Pilot-LS-Survey3-anon.csv").

These two datasets are to be uploaded to the research infrastructure as explained next.

5.2. Upload the Anonymized Dataset to the Research Infrastructure

Follow the following steps:
1. Make sure that the dataset is in fact anonymized (i.e. does not contain personal data)

2. Open the research infrastructure website at: https://ri.internetofus.eu/ and login with your credentials (if you don't have credentials please send an email to chenu@disi.unitn.it)
3. First click the button "Datasets" at the top of the screen to make sure you are in the datasets section and then click the button "Add Dataset" (as seen in Fig. 9).
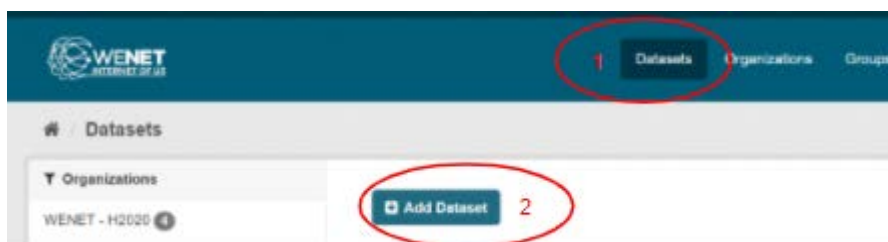

FIGURE 9 ADDING A DATA SET

4. In the form that appears, fill the "Title" field with the same filename as the file you want to upload and scroll down to find the Licence, Organization and Visibility fields. Make sure to fill them correctly with the values "Other (Not Open), "WENET - H2020" and "Private" respectively (as shown in Fig. 10 below). At the bottom of the page click the button "Next:Add Data".

FIGURE 10 THE THREE KEY PIECES OF INFORMATION TO COMPLETE

5. Click the button "Upload" and select the file (csv or excel file) that you want to upload and then scroll to the bottom of the screen and click the button "Finish"
6. Once uploaded please notify UNITN that the upload has finished and they will work on filling up the correct names and metadata for the dataset.

4. i-Log-Helpdesk-material

1. About WeNet

WeNet is an interdisciplinary project that involves computer science, sociology and engineering.

The members of the project come from all over the world.

The highly skilled consortium, led by the University of Trento, is composed of 15 partners from Europe and Israel, India, Mongolia, Paraguay, Mexico and China.

The main goal of WeNet is to develop the culture, science and engineering methodologies, algorithms, social interaction protocols for an online platform that will *empower machine mediated diversity-aware interactions* between people.

"*Diversity is part of our everyday life. Technology, despite its evolution, still cannot develop and maintain social relationships that transcend geographical and cultural backgrounds*"

WeNet addresses this gap by connecting people who can help each other, and the key is leveraging their diversity.

The WeNet platform will be the basis of a series of studies within universities across the world with diverse student populations. The studies will look at how the platform can improve students' quality of life inside and outside the academic environment.

WeNet's innovative paradigm impacts human interactions in general, especially those that may benefit from a collaborative approach (creative industries, medical diagnosis, …). The WeNet consortium will develop a research infrastructure to exploit the project results and strengthen the European innovation ecosystem with a worldwide perspective.

2. What is i-Log

I-Log is a unique and innovative app for data collection.
It was designed with privacy and ethics in mind, addressing issue of:

● **Transparency**
making people aware that the app is collecting data

● **Accountability**
any unexpected result can be traced

● **Data protection**
enabling the best safety measures and compliance with GDPR

● **Lack of bias**
avoiding misunderstanding by matching self-reported data with data collected by the machines

I-Log is developed to collect information from users and from their smartphone. The first collects data from the internal sensors in the phone in a completely non-intrusive manner, without the need for any interaction from the user, but keeping him informed of the current collection through an always visible notification. In fact, each phone is equipped with a number of sensors, the use of which is monitored by the app, in full compliance with the rules agreed for privacy. Therefore, no sensitive content such as message texts, internet searches or call content will be recorded. i-Log is able to capture a varied and growing number of mobile phone sensors and events (Currently up to 41).


The second component requires, instead, the active collaboration of the user, as it involves the administration of a questionnaire. This will appear directly on the smartphone and will be comprised of two groups of questions: the first, concerning the expectations on the day and whether these will be expected or not, will appear once a day, in the morning and in the evening; the second, which consists of 4 short queries, will appear at intervals of 30 minutes in 24 hours. The 4 questions will concern, in order: what you are doing, where you are, who you are, and finally, how you judge your mood.

3. How does it work?

Before tackling the various parts of the app's functioning, it is useful to dwell on some general characteristics:

1. I-Log does not compromise the usability of the phone in any way.
2. From tests carried out, the battery consumption is at most 7% per hour, not far from normal consumption. When the battery reaches 5% i-Log turns off automatically.
3. i-Log is multilingual and chooses the language set in the phone.
4. i-Log starts automatically when you turn on the phone. At any time, you can decide to stop the experiment by pressing the stop button.
5. When the experiment is in progress the user is always informed via a notification. If the notification is not active, it means that data collection is NOT in progress.

Registration procedure
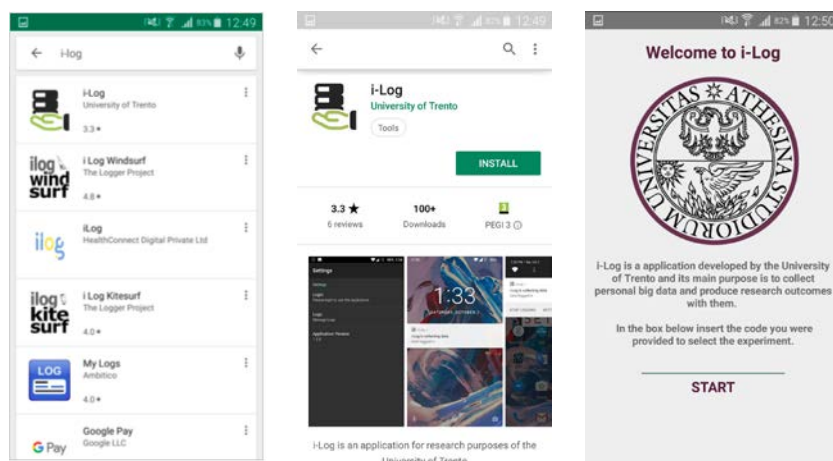
At the first start you will have to complete a procedure in which you will be asked to log in with your personal account, consent to the processing of data, permission to use the sensors and the battery and a short profiling procedure. Try to give as many permits as possible and leave every detection system active. The content of messages, videos, photos, and voice cannot be detected in any way.
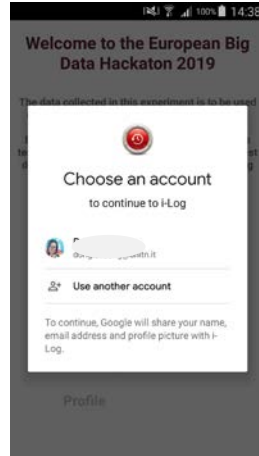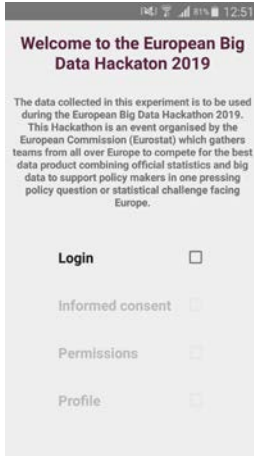
You can always manage the permissions and other configuration options from the Settings menu on the app icon. However, leaving every detection system active, you will ensure that data collection takes place at its best and in the most complete way.
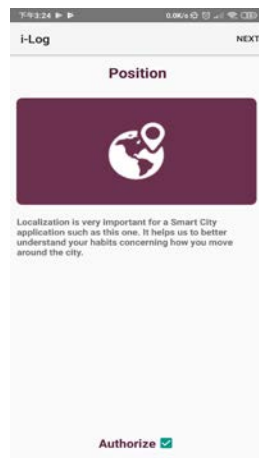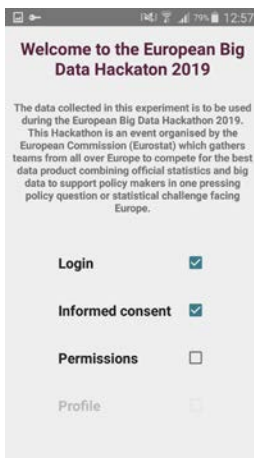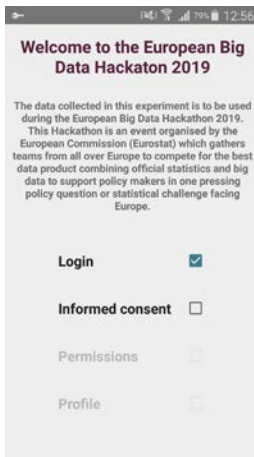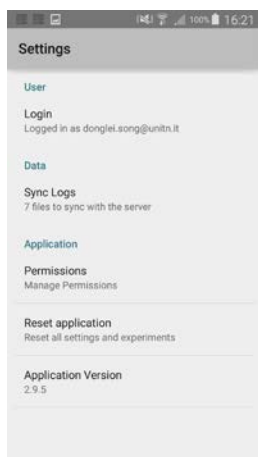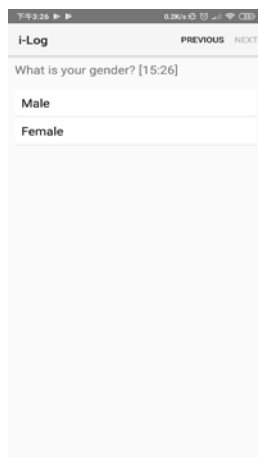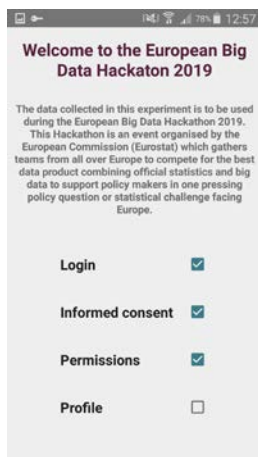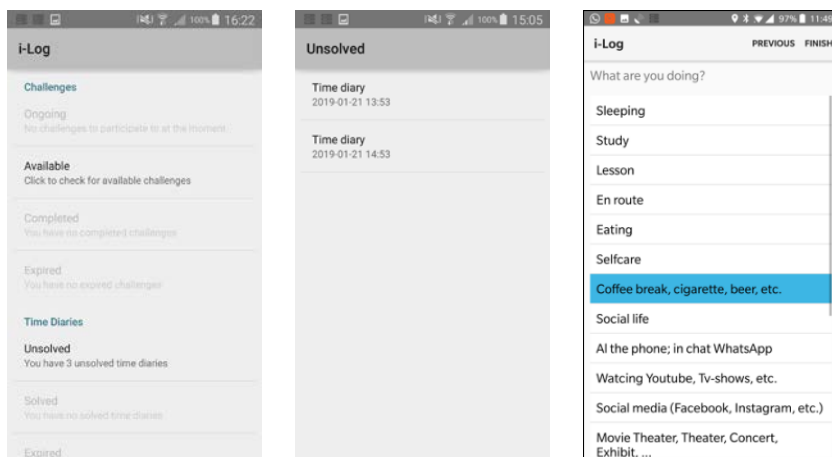
What to do if...

If you had to turn off the phone, before doing so, stop * even I-log otherwise you will lose data collected in the last 30 minutes.

The sensors are very important, so: make sure that Wi-Fi and GPS (localization) are always on.

Remember to bring the battery charger while the experiment is running.

4. Daily questions

Answer times

As specified in the paragraph i-Log app, this method of data collection should, among other things, reduce the problems previously encountered in similar investigations, related to memory (forgetfulness, different memories, ...) and to the lack of time. For this reason and following the principle with which the app was structured, we would ask you to fill in the questionnaires as they appear on your phone. Obviously, this will not always be possible.

What to do if you cannot answer

If you cannot answer the questions immediately, you can accumulate up to a total of 5 questions. In this case, answer by starting from the oldest if possible.

Before going to sleep, remember to communicate it to the i-Log app by clicking on the icon in the Settings menu and then on the "Sleep" option.

5. Privacy

The WeNet Project have been evaluated by the Ethics Committee for Experimentation with Human Beings and is held in accordance with the EU Regulation 2016/679 "General Regulation on the protection of personal data" (GDPR), the D.lgs. n. 196/2003 "Code regarding the protection of personal data" and the relative Annex A.4 "Code of ethics and good conduct for the processing of personal data for statistical and scientific purposes" (Provision of the Guarantor No. 2 of the June 16, 2004, Official Journal August 14, 2004, No. 190) sanction the right of every person to the protection of personal data.

Pursuant to the aforementioned legislation, the processing of personal data by researchers involved in the research activity of the WeNet Project will be based on compliance with the principles set forth in art. 5 of the GDPR and, in particular, to those

of legality, correctness, transparency, relevance, not excess and in order to guarantee an adequate security of personal data.

The data are collected, stored and processed anonymously. Each participant will be assigned an ID so as not to be able to relate it to his true identity. Furthermore, personal data may be communicated anonymously to other universities, institutes, research institutions and / or researchers for similar research purposes.

Participants can request their data, withdraw from the survey at any time and ska data and ID being deleted.

6. What do we do with collected data?

WeNet in México
You-i LAB

How to support the development of diversity-aware, machine-mediated paradigm for social interactions in México?
San Luis Potosi – local context

1.2 million inhabitants
11th largest urban area in Mexico
1440 square km

Contextualized pre-pilots:
- Choose a topic that matters to people, so they get naturally involved into social interactions.
- Consider a captive population willing to participate.
- Engage people into a local campaign/initiative that can gradually grow at a regional/national level.

Seven out of ten adults, and one out of three children, are overweight or obese
Hypertension
Low self-steem
Depression Diabetes Heart problems
70 million patients to sickness associated to obesity
Situational awareness of local/international institutions about the problem

Lesson Learned

Co-funded by the Horizon 2020
Framework Programme of the European Union
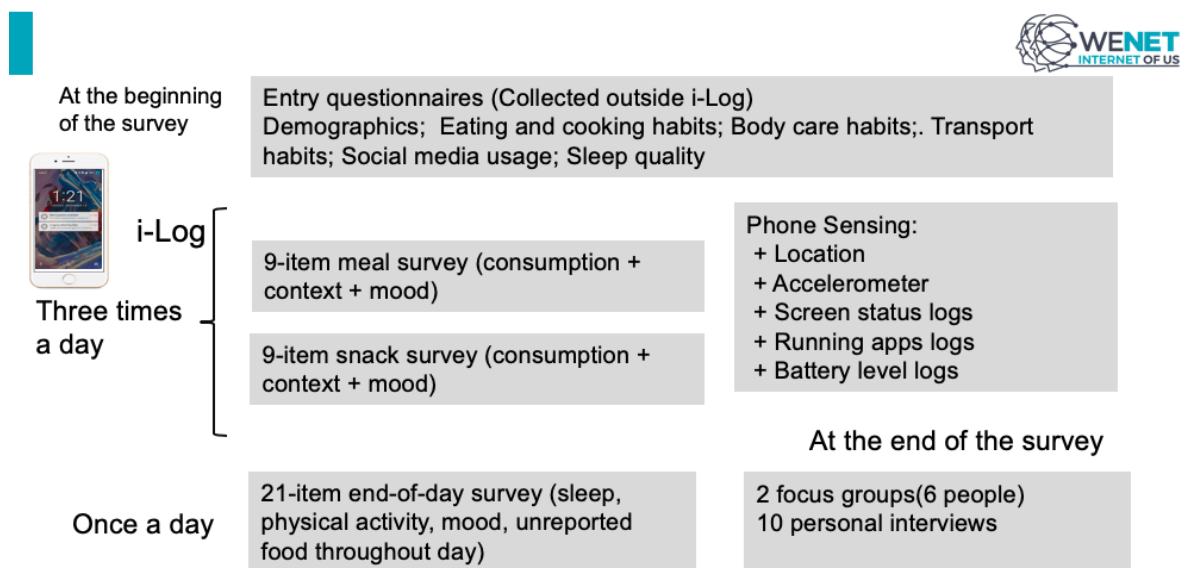
- The development of a diversity-aware, machine-mediated paradigm for social interactions has great potential to impact people México (society is very diverse and heterogeneous).
- This kind of technology can also support the development of citizen-based solutions to challenging health, environmental, social, and urban challenges that are faced by people in México in their daily lives.

7. FAQs

I can't find the app on the Google Play store

Please check that you have an operating system Android 5.2 or higher installed on your smartphone. Typically, the information is found in Settings » System Info. If so, please try checking punctuation in your search on the Google Play Store (i-Log).

NOTE that the i-Log app is not located on the App Store, but only on the Google Play Store. Therefore, if you have an iPhone you will not be able to install it.

Does i-Log work on iOS?

At the current time i-Log is available only for Android devices but we plan to release an iOS version soon**.**

Is i-Log compatible with my smartphone

A: i-Log works on every phone that runs Android version 6 or up, you can check your operating system version in the Settings of your device. On some smartphones there are some aggressive battery saving techniques i.e., Xiaomi, Huawei, latest Samsung, among others. On these phones there is usually the possibility to exclude some applications from this and i-Log should be one of them. The way to do it depends on different factors and you should probably search on Google how to do it for your phone/operating system. To be clear, it happens also with Whatsapp and other very popular applications, however, they are so popular that they are excluded by the battery saver policies by default.

On devices that use *stock Android operating systems* it is enough to grant i-Log the *battery permission* during the installation procedure but unfortunately this is not enough on many devices.

Can I install the app on tablets?

We prefer the use of personal phones for the experiment since they are easier to carry everywhere. If you can only use a tablet you could try but remember to always carry the tablet with you, to participate in the experiment in the best possible way. Nevertheless, there are some technical issues also with tablets not having all the sensors the phones have so it should only be used as a last resort.

How do I know if the application is working?

The application is running if at least one notification saying "i-Log, Tracking is activated" appear in the notification bar of the smartphone. You should see one (or multiple) small icons on the top left of the screen and one (or multiple) notifications when you swipe down from the top (NB. this is smartphone dependent, some brand do not show the icons, on some of them you have to swipe with one finger, two fingers, etc).

Which email account should I use to log in?

You should use your personal email, which is the main Gmail account that you used to access the services on your smartphone.

Do I have to agree to all the required permissions?
Yes, otherwise you will not be able to complete the installation procedure. You can manage the permissions by accessing from the app menu, but in order to make the experiment successful, I would ask you to keep the GPS always on.

Does i-Log acquire all kinds of permission of my phone?
No, i-Log only accesses some of the permissions according to the purpose of WeNet study. For more information please refer to the instruction 1.5 Permissions.

Why my steps of permission are different from the instructions?
Depending on your Android version some permission granting may be slightly different

A friend of mine installed the app and I would like to participate in the experiment too
Right now we are not receiving additional participants because they would need to fill up the first survey (which is not available anymore) to participate.

Does i-Log consume giga/data connection?
No, i-Log was designed not to consume data on your smartphone.
The data is collected automatically only when you are connected to a Wi-Fi. You can change this option by accessing the Settings on the i-Log screen.

Is the application using a lot of disk space?
It should not. The application stores the logs momentarily on the device before synchronizing them over Wi-Fi. If you are always connected to a Wi-Fi (like most people do), it does not occupy any space. If you experience high storage occupation rates, try to see if you have unsynchronized logs.

Is the application going to affect the battery life of the smartphone?
By a certain extent, yes, but depends. Depending on the experiment you will be participating in (and consequently on the sensors used), the application can consume no to a considerable amount of battery. But keep in mind that i-Log runs continuously and is not like other application that you open, use for 5 minutes, and then close. Compared to it, Facebook, Pinterest and others consume way more battery! In the end, if you use Facebook, how long will your battery last? I bet less than some hours…
We put a lot of effort into minimizing the impact on the battery life of i-Log. We can give you some pieces of advice, some lessons learned so that you can use it in the most efficient way possible:
1.   Keep the Wi-Fi of the smartphone on and, if possible, let it connect to available networks. If the phone is connected to a Wi-Fi, i-Log detects the user location (when applicable) from there and not from the GPS sensor (that is the most energy depending component of the device, apart from the screen (that we do not use));
2.   Inside or close to buildings, there is no GPS signal. If you are in the office, at your desk, you should be connected to a Wi-Fi network, otherwise i-Log keeps trying to detect the GPS signal and this is an energy demanding task.

Is i-Log compatible with external Battery Manager applications

On the Google Play store nowadays it is possible to find many applications that promise to save the battery life of your device. Some devices come with this kind of applications pre-installed. As a general rule, i-Log is not compatible with them because they simply kill all the applications that run in the background. The smarter applications allow to white-list and exclude some applications from this behaviour: i-Log should be one of them. To be clear, it happens also with Whatsapp and other very popular applications, however, they are so popular that they are excluded by the battery saver policies by default.

Is i-Log compatible with my smartphone's (temporary) Battery Saver settings?
On many Android phones there is the possibility to *temporarily* enable a specific setting that limits the battery consumption, it is usually called **Battery Saver** (the name can be different, it depends on your phone brand/model) and is accessible from the top menu (scrolling down). This functionality should be used rarely by the user in those situations when the battery level is low and you need it to last some more hours. When this functionality is enabled, i-Log (as well as any other application running in the background and/or fetching data in the background) is blocked by the operating system and cannot collect data. To overcome this limitation, most of the operating system *allows to exclude* from this behaviour some applications: **i-Log should be one of them**. The way to do it depends on different factors and you should probably search on Google how to do it for your phone/operating system. To be clear, it happens also with Whatsapp and other very popular applications, however, they are so popular that they are excluded by the battery saver policies by default.

If you are using Xiaomi phones, please turn off "**Battery Saver**" manually after finishing the installation.
Refer to i-log instruction **1.5. Permission-Battery-Xiaomi**.

If you are using Samsung phones, please turn off "**Battery Saver**" and apps similar to "**Smart Manager app**" manually after finishing the installation.
Refer to i-log instruction **1.5. Permission-Battery-Samsung**.

If you are using Sony phones, you can put i-Log into "**Power-saving exceptions**" manually after finishing the installation.
Refer to i-log instruction **1.5. Permission-Battery-Sony**.

If you are using Huawei phones, please turn off "**Battery optimization**" manually after finishing the installation.
Refer to i-log instruction **1.5. Permission-Battery-Huawei**.

How do I access notifications?
Notifications should appear directly on your smartphone screen. If not, try to check from the (Settings) menu of the app, which is located on the smartphone screen (not the i-Log icon). If you don't see the settings button, pull the screen down with two fingers.

I can't find the app menu
The (Settings) menu of the app is located on the smartphone screen (not the i-Log icon). If you don't see the settings button, pull the screen down with two fingers.

Do I always have to answer every half hour?
No, although, for the sake of a successful experiment, it is advisable to try to answer every half hour. Applications accumulate up to a maximum of 12 notifications (i.e. 6 hours of detection).

After that, i-Log will begin to erase the older one, to make space for new questions that appear every half hour. Therefore, to avoid losing too many notifications (and the possibility of being paid) as well as forgetting what you were doing or having to fill in too many time diaries in one go, I recommend checking the app at least every 2 hours.

Additionally, you have the option to stop notifications in three moments:
1. when you go to sleep
2. when you are in class
3. when you play sports

You can find this option on the app settings.

Can I stop notifications?

Yes, you have the option to stop notifications in three moments:
1. when you go to sleep
2. when you are in class
3. when you play sports

You can find this option on the app settings.

Q: Is it normal that I don't receive notifications on i-Log (when applicable)

No it is not normal, if you had internet connection (which is required to receive questions) then please send a request for help to the experiment helpdesk (more information below).

Can I turn off the smartphone?

Yes, you can. Remember before stopping the app (you can find the option on the i-Log drop-down menu). In this way all your data that you have not yet synchronized will be kept on your smartphone.

If you do not stop i-Log, all unsaved data (and therefore not sent to the server) will be lost. To avoid this, I recommend checking every now and then the number of notifications you haven't sent yet. You can see them through:

Smartphone screen (Do not click on the i-Log icon - if you don't see the settings button, pull the screen down with two fingers) **»** Settings **»** Data **»** Manage Log **»** "n. files to sync".

What happens if I my smartphone shut down?

If you do not stop i-Log, all unsaved data (and therefore not sent to the server) will be lost. To avoid this, I recommend checking every now and then the number of notifications you haven't sent yet. You can see them through:

Smartphone screen (Do not click on the i-Log icon - if you don't see the settings button, pull the screen down with two fingers) **»** Settings **»** Data **»** Manage Log **»** "n. files to sync".

Furthermore, even if i-Log has been designed to consume a maximum of 7% of daily battery, I recommend that you always carry the charger with you for the duration of the experiment.

My phone broke and I just got a new one, can I continue the experiment?

Yes of course. Once you download the app you will only have to be careful to log in with the same credentials that you used when you installed it the first time. In this way we can also recover all your data.

I remind you that for the success of the experiment (and therefore to be paid) you will have to fill in at least 75% (i.e. 11 days) of the notifications.

Time diaries, what does it mean ...?
- *Personal care* includes activities such as brushing, combing, make-up, having a shower, etc.

- *Social Life / Entertainment*: hang out with friends or colleagues that involve relaxing activities such as going to the pub, walking, or going to dance / karaoke, etc.
- *Social media* refers to the use of Facebook, Instagram, Twitter, etc.
- *Internet (for leisure)* refers to the use of internet not for study/work activities, which involves watching TV series, movies, YouTube, or commercial sites such as Amazon and eBay, look at the personal Mail, ...
- *Cultural activity (Cinema, Theater, ...)* includes all cultural activities carried out outside the home. Also included are Concerts, participation in Conferences, ...
- *Arts / Hobbies* are all kinds of entertainment, even occasional, not included in the previous wording. If you are an artist or a professional musician and you are preparing for a performance, you will prefer to indicate the hours spent for this purpose as *Study* or *Work*
- *Rest* is considered as the afternoon rest, different from the option e. To sleep
- *Home* is the DOMICILE you have during the period in which you attend classes. If you live with your parents, select *Parents Home*, which concerns the place where there is your legal RESIDENCE.
- *Library* is intended as a university library, different from the Municipal or Foundations, for which the option *Others Library* should be selected.
- *Friends home*, acquaintances or distant relatives who are not your family members
- *Work* includes both the activities you do for your (paid) job and those you do for an internship (at university or another institution/company). For activities other than those mentioned, you can select the *Study* or *Volunteer* options.

8. Troubleshooting

Correct configuration checklist
- Do you turn WiFi on?
- Do you connect to a WiFi every day?
- Do you turn GPS on?
    - Please make sure that the **Location** quick setting button on the notification panel is enabled.
    - If you cannot find that button, please check the default setting of your phone: Please google "turn on the GPS + brand of your phone".
- Is the **High Accuracy**(GPS) in the location settings enabled?
- Please make sure that **Battery Saver** function must be turned off (usually, the quick setting button of **Battery Saver** can be found on the notification panel) .
- Please do not update OS during the study/experiment.

I can't send logs / notifications
If you can't upload the data, try the following:
- After making sure that that the configuration is correct (previous point)
- Go to the smartphone screen (Do not click on the i-Log icon - if you don't see the settings button, pull the screen down with two fingers). Then click on Settings » Data » Manage Log and click on the button with the wording "n. files to sync". Even if nothing happens, the server has taken care of your submission
- Wait up to 10 minutes for at least the first file to be synchronized (if there are many - i.e. more than 10- and you have a slow connection, it takes a while. I recommend using a good Wi-Fi)
    - If after 10 minutes they don't sync, log out and login again and try again
    - If it doesn't work, stop i-Log and then restart your phone and try again

○ If after this procedure it still does not work, please contact me again. We will try to solve the problem in another way, that is by meeting and downloading the data manually. In any case, do not uninstall the app before the files are synchronized.

For Huawei owners

Huawei phones have an option called protected app whereby an app is closed as soon as the screen is turned off, unless it is on the list of apps protected.

Unfortunately, there does not seem to be a way to do it automatically like on other phones. So, Huawei owners will have to do it by hand, with the option Battery » Close app on screen lock.

9. Requesting Help

If you have a problem not covered before, please write a message describing your issue. Make sure to include:

- Your Phone model
- Your Android version
- A description of the different steps where you noticed the issue, or the situation around the issue

1. MAIL TEMPLATES

1. QUESTIONNAIRE

1. WP7_Welcome_Message

Dear student,

We ask you 20 minutes of your time to participate in the multi-purpose survey proposed by the University of [...] in collaboration with the project **WENET-Internet of us** and tell us about your experience at the [...]. The survey collects information on lifestyles and academic performance, and it is divided into five parts, concerning:

1. Information about you and your accomodation
2. The psycho-social profile
3. Social relation with peers and classmates
4. Cultural activities and consumption
5. Parents education attainment

At the end of the questionnaire, we will ask you to join the second part of the survey. You will have the possibility to participate in a **paid two-week experiment** - extendable for another two - which involves the installation of a data collection app on your smartphone, called iLog.

The members of the WeNet Project and the scientific coordinator of the Survey Prof. [...] sincerely **thank you**, also on behalf of the Department of [...], for the fundamental help you will give to this survey filling in the questionnaire.

ADD HERE THE TRANSLATION

2. WP7 -1stSURVEY_Invitation_TEMPLATE

Dear {FIRSTNAME},
We ask you 20 minutes of your time to participate in the multi-purpose survey "**WENET: Internet of us**" and tell us about your experience at the University of [...].

Before starting to fill in the questionnaire, please read the present description of the Project and the related privacy statement which you will find below.

The members of the WeNet Project and the scientific coordinator of the Survey Prof. Ivano Bison sincerely thank you, also on behalf of the Department of Sociology and Social Research and of the Department of Information Engineering and Computer Science, for the fundamental help you will give to this survey filling in the questionnaire.

The survey is titled:
"{SURVEYNAME}"

To participate, please click on the link below.
{SURVEYURL}

Sincerely,

Prof. Amalia De Götzen

Prof. Ivano Bison

INFORMATION ABOUT THE SURVEY

The "WENET: Internet of us" survey collects information on the lifestyles and academic performances of the students of the University of Trento. The survey will collect information on the following topics: (a) Study methods and academic participation; (b) Leisure and cultural consumption; (c) Housing choices and Use of mobility systems; (d) Lifestyles. These aspects will make it possible to know in detail useful information to outline the behaviors, habits and attitudes of students in their daily life. This will allow both to improve the knowledge of the student's life and to promote the design of new technological tools and targeted support policies. In order to pursue the aforementioned purposes, the collected information from this survey will be associated with other information relating to your career path (gender, age, department of reference, course of study, year of course, credits earned).

Furthermore, you will have the opportunity to participate in a paid two-week experiment - extendable for another two - which involves the installation of a data collection app on your smartphone, called i-Log.

Considering the first survey, this questionnaire consists of six parts:

1. The habits linked to the management of the university routine, the relationship with one's fellow students and the use of university spaces
2. The housing choice linked to the university path Urban and extra-urban mobility as well as some eco-sustainable behaviors;
3. Lifestyles, including eating styles and body care and physical activity.
4. Free time management during the academic year
5. Cultural consumption
6. The main psycho-social traits

We specify that you always have the right not to answer some questions or to interrupt the compilation. The partially collected data will still be useful for the purpose of the investigation.

At the end of the questionnaire you will find a section dedicated to consent to participate in the experiment with the i-Log app. The app, once installed on your phone, will send at regular intervals the request to answer four questions that require a few seconds of your time ("Where are you?"; "With whom are you?"; "What are you doing?"; and, "What mood are you?"). It will be possible not to respond to notifications at the moment, but to accumulate up to a maximum of 12. After that the app will start to delete them, starting from the least recent.

Furthermore, the app will collect data from your phone's sensors, such as location, accelerometer or if your phone is on or off. For this app experiment there is a 20€prize for participation in the first 2 weeks of the experiment or 40€for participation in the entire month. The compensation will be given to all participants who have correctly performed at least 75% of the experiment (both during the first and second two weeks). In addition, there is a random daily drawing of five prizes of 5€and the final drawing of three prizes of 100€for those participating in the first two weeks and three prizes of 150€for those who participate in the whole month, to be selected randomly among those who will have filled out the greatest number of questions.

If you decide to participate in this second survey and agree to be contacted again, you will receive an email with the basic instructions for using the i-Log app and a manual that explains in more detail the project and the app components as well as the rules that you will need to follow to benefit from the expected compensation. Even in this case, we specify that you will always have the right not to answer some questions or to interrupt the compilation. The results of the survey will be disseminated in aggregate form and therefore it will not be possible to trace the subjects to which the data refer.

For information relating to the survey, you can contact the Scientific Director, Prof. Ivano Bison, at the following address: survey.dsrs@unitn.it

INFORMATION ON THE PROCESSING OF PERSONAL DATA

We wish to inform you that the current legislation on data protection, with particular regard to the field of research (EU Regulation 2016/679 on the protection of personal data - GDPR, Legislative Decree No. 196/2003 "Code on the subject of protection of personal data" as amended by Legislative Decree 101/2018, the "Rules of ethics for processing for statistical or scientific research"- Order of the Guarantor for the protection of personal data No. 515 of 19 December 2018 and the various provisions of the Guarantor on the subject) establishes the right of every person to the protection of personal data concerning him. In compliance with the aforementioned law, the processing of your personal data in the research project will be based on the respect of the principles set forth in art. 5 of the GDPR and, in particular, lawfulness, correctness, transparency, relevance, non-surplus and in order to guarantee an adequate security of the data.

The Data Controller is the University of Trento, via Calepina n. 14, 38122, Trento, email: ateneo@unitn.it.

The contact of the Data Protection Officer is: rpd@unitn.it.

The processing of your personal data is carried out for the realization of the scientific purposes of the research project. To view the complete informative, click the following link: WeNet_(NON-EU)Privacy-Informative

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If you do not want to participate in this survey and don't want to receive any more invitations please click the following link:
{OPTOUTURL}

If you are blacklisted but want to participate in this survey and want to receive invitations please click the following link:
{OPTINURL}

3. WP7 - 1stSURVEY_reminder_TEMPLATE

Dear {FIRSTNAME},

Recently we invited you to participate in a survey.

We note that you have not yet completed the survey, and wish to remind you that the survey is still available should you wish to take part.

The survey is titled:
"{SURVEYNAME}"

To participate, please click on the link below.
{SURVEYURL}

Sincerely,
Ivano Bison

If you do not want to participate in this survey and don't want to receive any more invitations please click the following link:
{OPTOUTURL}

4. WP7-2ndSURVEY-Invitation_TEMPLATE

Hi {FIRSTNAME},

You have been selected to participate in the second part of our survey!

Below you will find a link to a short questionnaire that I would ask you to complete before starting the experiment, which will start on November 11th.

As soon as the procedure of initialization of the identifiers has been completed, you will receive an email with instructions and a code to download and install the i-Log app.

For any doubt or curiosity, you can contact our helpdesk at: helpdeskUNITN@we-net.eu

Click here to do the survey:
{SURVEYURL}

We would like to take this opportunity once again to thank you for your valuable cooperation.

Best regards,

The members of the WeNet Project

Prof. Ivano Bison

If you do not want to participate in this survey and don't want to receive any more invitations please click the following link:
{OPTOUTURL}

If you are blacklisted but want to participate in this survey and want to receive invitations please click the following link:
{OPTINURL}

2. I-LOG

1. WP7 - 1st ilog_email_TEMPLATE

Dear participant,
thank you for choosing to participate in the survey!

From now on you can download the i-Log app from the Google Play Store using the following link:
https://play.google.com/store/apps/details?id=it.unitn.disi.witmee.sensorlog&hl=en
Before downloading the app, we invite you to read the instruction flyer that you will find attached (both in Italian and English).

Please notice that it is important to select a personal Gmail account during the registration.

After installing the app, to register simply use the code below and follow the instructions.

The code to start the installation procedure is: **390611**

We would ask you to download the app and install it by Wednesday 11 November at 12 noon. Unfortunately, all participants who have not registered will have to be excluded from the survey.
You will receive an additional confirmation email on Thursday 12 November.

For any further information and curiosities, you can contact our helpdesk at:
helpdeskUNITN@we-net.eu

Co-funded by the Horizon 2020
Framework Programme of the European Union

We wish you a good experiment!
WeNet project members
Prof. Ivano Bison

PS: Please note that the latest versions of Android have changed how granting the "Location" and other sensors work. If multiple options are available, make sure to select the ones that consent the use of the sensor even when the app is not open or being used.
Similarly, the latest versions of Android have changed how granting the "Do not optimize battery" permission works. The following steps should work:
a) For granting this permission, the i-Log screen will send you to a system screen where you see all the apps that are not allowed to optimize battery.
b) At the top select "all applications" so the list below includes all the applications installed in your phone
c) Find i-Log in this list and click on it toggle the permission, allowing it to not be optimized for battery saving

2. WP7 - 2nd ilog_email_TEMPLATE

Dear participant,
A kind reminder to install the app. If you have already installed the app you can ignore this message.

From now on you can download the i-Log app from the Google Play Store using the following link:
https://play.google.com/store/apps/details?id=it.unitn.disi.witmee.sensorlog&hl=en
Before downloading the app, we invite you to read the instruction flyer that you will find attached (both in Italian and English).

Please notice that it is important to select a personal Gmail account during the registration.

After installing the app, to register simply use the code below and follow the instructions.

The code to start the installation procedure is: **390611**

We would ask you to download the app and install it by Wednesday 11 November at 12 noon. Unfortunately, all participants who have not registered will have to be excluded from the survey.
You will receive an additional confirmation email on Thursday 12 November.

For any further information and curiosities, you can contact our helpdesk at:
helpdeskUNITN@we-net.eu

We wish you a good experiment!
WeNet project members
Prof. Ivano Bison

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Framework Programme of the European Union

PS: Please note that the latest versions of Android have changed how granting the "Location" and other sensors work. If multiple options are available, make sure to select the ones that consent the use of the sensor even when the app is not open or being used.

Similarly, the latest versions of Android have changed how granting the "Do not optimize battery" permission works. The following steps should work:

a) For granting this permission, the i-Log screen will send you to a system screen where you see all the apps that are not allowed to optimize battery.

b) At the top select "all applications" so the list below includes all the applications installed in your phone

c) Find i-Log in this list and click on it toggle the permission, allowing it to not be optimized for battery saving

3. WP7 - 3rd_ ilog_email_TEMPLATE

Dear participant,
thank you again for choosing to participate in the survey!

Starting tomorrow morning (Friday 13th) at 9:00 am you will start receiving notifications from the i-Log app. The experiment will last a whole month. After the first two weeks you will be asked if you want to continue participating. In the second two weeks, the number of notifications you will receive will be reduced

For any further information and curiosities, you can contact our helpdesk at: helpdeskUNITN@we-net.eu

We wish you a good experiment!
WeNet project members
Prof. Ivano Bison

PS: if you have not installed the app yet, here is a reminder.
You can download the i-Log app from the Google Play Store using the following link:
https://play.google.com/store/apps/details?id=it.unitn.disi.witmee.sensorlog&hl=en
Before downloading the app, we invite you to read the instruction flyer that you will find attached (both in Italian and English).

Please notice that it is important to select a personal Gmail account during the registration.

After installing the app, to register simply use the code below and follow the instructions.

The code to start the installation procedure is: **390611**

We would ask you to download the app and install it by this evening Thursday 12 November.
Unfortunately, all participants who have not registered will have to be excluded from the survey.
You will receive an additional confirmation email late this evening.

PS2: Please note that the latest versions of Android have changed how granting the "Location" and other sensors work. If multiple options are available, make sure to select the ones that consent the use of the sensor even when the app is not open or being used. Similarly, the latest versions of Android have changed how granting the "Do not optimize battery" permission works. The following steps should work:
a) For granting this permission, the i-Log screen will send you to a system screen where you see all the apps that are not allowed to optimize battery.
b) At the top select "all applications" so the list below includes all the applications installed in your phone
c) Find i-Log in this list and click on it toggle the permission, allowing it to not be optimized for battery saving

4. WP7_Last Day_email_TEMPLATE

Dear all,

Today marks the last day of the i-Log experiment! Starting tomorrow, please check that you have synchronized all data correctly, by clicking on Settings from the drop-down menu of the i-Log app. After you made sure all is fine, you will be able to uninstall the app.

Just a reminder that for the compensation for participation, the online questionnaires we sent you by emails (respectively entitled "WeNet - Questionnaire i-Log" and "WeNet - Questionnaire i-Log2") will also be counted. In case you haven't done or finalized them yet, we invite you to fulfill them by the end of the week.

Evaluation and final compensations
Together with your contribution, the WeNet project will evaluate the results of the experiment from a global data collection involving China, Denmark, Italy, Mongolia, Paraguay and the United Kingdom. Once we have preliminary results, we are happy to share our findings with you.
Once all the data has been collected, we will proceed to evaluation and extraction of the final prizes. You will then receive information on the amount of your remuneration and how to request payment. Please note, that due to the sheer amount of work to be done for evaluation on the global scale and the holidays season ahead, participation may not be evaluated before the end of January. We apologize in advance for the wait.

Would you participate in a future study?
Following the i-Log experiment you have just participated in, we are going to run our new paid experiment in February-March 2021, that will involve testing a chatbot that connects people on a campus with others. The chatbot will be supported by algorithms that harness diversity in communities. We hope to count on your participation for this future study as well! :)

We take this opportunity to thank you for your precious collaboration and to wish you happy holidays!

Best regards
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