



## Modus operandi for ethical action in social and health care in the era of digitalisation

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#### **Abstract**

The ethical operational model developed in SotePeda 24/7 project in 2018-2020 has since its launch been used in continuous learning in social and health care. The model was developed to work as a tool in identification of ethical issues in the digitising operational environment of social and health care, as well as to support ethical evaluation and decision-making. When the ethical operational model is embraced, it results into internalizing the reflective process of the model and increases the ability to face ethical dilemmas in the mode of *modus operandi* indicating socio-culturally established ways of engaging and of doing things.

Our aim in this study is to evaluate the experiences gained of the implementation of the ethical operational model in continuous learning in social and health care. As research methods we apply qualitative evaluation: program theory-based and systems approach. As material of the study, we address the experiences gained from the practical use of the model. Additionally, we scrutinize the ethical operational model as an artefact, as co-constructed object, and make use of the multifaceted data from the time of developing the model.

The results of our study indicate that when the ethical operational model has been systematically used in continuous learning, the experiences have been overall positive, increasing awareness and ethical competence of the participants. From the point of view of its systemic impact, the scrutiny of the ethical operational model as an artefact, indicates that the focal constituents embedded enable even those new to the model to engage in it and to develop the content further via reflection.

We conclude that the ethical operational model has found its way in active use as means of continuous learning in social and health care. The model may gradually become infused in digital era practices and be vitally present in action as *modus operandi*.

Keywords: digitalisation, health care, learning, models, professional ethics, social welfare

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## Introduction

The era in which we have lived in the first decades of the 21st century can be referred to as that of digitalisation. As a result of development and use of new technologies, fundamental changes have taken place in human interaction, in communities, as well as in societies at large [1]. Social and health care is no exception, as the digitalisation penetrates all areas of life with accelerating speed. While living in this era, and working and teaching in these fields, it is crucial to reflect on the role of this on-going, often technology-driven in contrast to need-driven change, and to find ways to influence current and further developments with constructive and concrete initiatives. For example, Bayne & Doule have highlighted ethical issues in competences of employees in social and health care. The actions of ethical decision-making address at the micro level client relationships and at the macro level social justice in systems that impact client's welfare. Ethical decision making requires professional identity and understanding the code of ethical standards [2].

The ethical foundation and guidelines for the work in social and health care can be considered well-articulated in the literature of these fields [3,4]. To study ethics and to reflect on practical ethical questions is also an essential part of the curriculum while studying to become for example a midwife, a nurse, a social counsellor, or a social worker. Due to digitalisation, both students and teachers are facing new kinds of ethical dilemmas and many of the good old questions need to be pondered over, and eventually formulated anew. A gradual awakening to this has also resulted in rethinking and re-formulation of ethical models. The ethical operational model developed in SotePeda 24/7 project in Finland between the years 2018 —

2020 [5,6] is addressed in this article from the point of view of its potential in practical use: how to take seriously [1] and to proactively deal with ethical dilemmas related to digitalisation. In our scrutiny we make use of the conceptualization of *modus operandi* indicating socio-culturally established ways of engaging and of doing things [7,8].

The model has since its publication in 2020 been utilized in educational purposes [9]. Additionally, the model is available for public [5,6]. The current state and rapid development of technology and especially the artificial intelligence have created ethical worries for the future. The change is fast and continuous and therefore this kind of model must be flexible to adjust with changes. Our aim in this study is to evaluate the experiences gained of the implementation of the model.

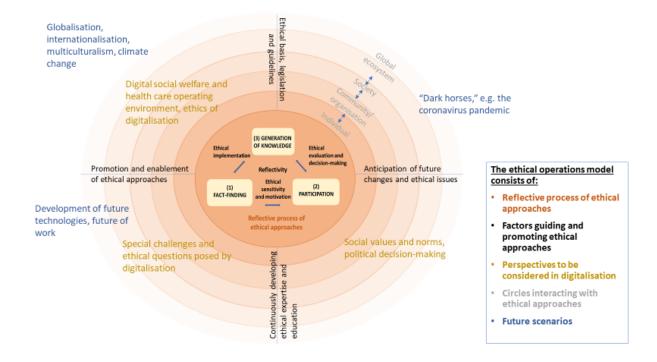
### The ethical operational model in a nutshell

The description of the ethical operational model examines ethical activities both as an entity formed by acts (reflective process of ethical activities) and as a wider entity formed by elements related to the operational model (ecosystem and the digitising operational environment of social and health care) [5,6]. The operational model is a qualitative description of the way in which, for example, work can be considered, or a task performed [10]. It refers to a concise description of a developed and proven solution that others can use, and defines the idea, purpose, target group, description and concrete use of the model and its benefits [11].

The model we co-created consists of five sections (Figure 1) that form an entity and are continuously interacting with each other. The sections are constantly changing, and they are reflected in the operational environment's changes.







**Figure 1.** Ethical operational model; consists of five sections [5,6].

The reflective process of ethical action is at the model's core. It can be used to reflect and process ethical issues or problems identified in activities as a communal learning process. The process can be utilised at the level of individual/employee, work community, organisation, and society. Factors guiding and promoting ethical activities contribute to the realisation of the reflective process of ethical activities. In ethical problem-solving, professionals base their judgement on legislation and ethical guidelines as well as on the ethical basis of social and health care. Ethical activities are promoted and facilitated, for example, through ethical management and organisational structures and operational culture. The continuous development of professional ethical competence enables the implementation of ethically sustainable and highquality service and care with customers.

Anticipating future changes helps to prepare for new ethical challenges. Digitalisation and the increasingly developing technology bring new ethical questions for inspection for example concerning our privacy and dealing with client and patient data. We also face increasing pressure in distinguishing facts from disinformation as has been demonstrated by the developments of artificial intelligence [12]. Professionals working in social and health care must know what kind of digitising operational environment we live in and what kind of technology we use in the customer services and care as well as in the organisation's activities and how we should seek ethically sustainable solutions for them [13]. Those studying for a profession must also understand what kind of impact technology has and what kind of new ethical questions it generates. Understanding the societal perspective is important. Forecasting future scenarios and their probability can be difficult, as the coronavirus





pandemic has shown in 2020–2022 [14,15]. The ethical questions related to them, intertwined with digitalisation, are worth ethical reflection. The circles that interact with ethical activities described in the ethical model highlight how global ethical issues, such as the climate change, affect the ethically sustainable activities of different actors and communities and vice versa [16].

The objective of the model is to work as a tool in the identification, evaluation, and decision-making of ethical issues as well as in activities in the digitising operational environment of social and health care, and education. The model emphasises a professional's ethical sensitivity and motivation as well as the use of dialogue in solving ethical problems.

## The processual constituents of the ethical operational model as a source of its viability

The ethical operational model was constructed in project team's trialogical learning process during development project 2018–2020 [5]. While reflecting the process, the project team found eight prerequisites of succeeding: 1) clear definition of the objectives 2) mutual understanding of the purpose 3) time frame and schedule 4) responsibilities and division of work 5) enthusiasm in the team 6) cooperation 7) empowering leadership 8) support of the project-management. The processual constituents can be described as significant steps of the project team and of participants in the workshops during the development process. Step by step the model took its current form.

The co-creation process of interprofessional development team from four Universities of Applied Sciences: Karelia, Häme, Diaconia and LAB (former Saimia and LAMK) can be considered successful. For example, it has been found that co-creation process is very motivating and constructs new

relationships via communication encounters: Stakeholders can build a shared identity of the ecosystem via collaborative interactive processes guided by a common purpose [17]. Both active dialogical interaction and shared curiosity of the ethical questions in social and health care as well as the interest of pedagogical development inspired team members. Workshops were forums, where citizens, students, and partners in working life discussed and shared experiences and thoughts about ethical questions, professional ethics, ethical competences in multiple digital environments. Also in literature, the significance of consensus-based orchestration to enable discussing about differences and raising awareness of the aim has been highlighted [18]. As a result of the inductive content analysis of the narrative literature review [19], nine themes of importance for the future were formed: 1) challenges for defining the terms, 2) professionals' active role in the development, 3) inclusion of citizens in the planning processes, 4) challenges for defining responsibilities and obligations, 5) expanded expertise with research-based knowledge, 6) privacy protection challenges, 7) risks of social exclusion, 8) multidisciplinary work in networks and 9) expertise in internationality [20]. Digital working Howspace proved agile forum for experts' discussions as well as documentation [21]. Discussions gave new and diverse information about ethical challenges and specially the need of ethical operational model. The continuing reflective evaluation throughout the process enabled the mutual learning in development team. The produced material could also be tested during the development process with students in partner universities of applied sciences.

The development process for the ethical operational model started as pedagogical process in social and health care education. As the model has





been utilized in various settings, new possibilities for its application have been identified in multidisciplinary organizations and networks as well as in political decision making [9,22].

## The purpose of the study and the research question

When referring to a pattern of thought and behaviour, that we suggest being utilized when dealing with ethical dilemmas related to digitalisation in social and health care, we deliberately use two expressions in our study. Firstly, the ethical operational model refers to the model developed in SotePeda 24/7 project and described in detail in Finnish [5] and in a summary article in English [6]. Secondly, we use the expression modus operandi for ethical action to emphasize the viable nature of the model. Modus operandi is understood as socio-culturally established ways of engaging and of doing things. A strategically chosen model has potential to become gradually infused in practices - to become modus operandi - because of individual and organizational action to implement it [7,8].

We conclude that successful implementation process of the ethical operational model, results into internalizing the reflective process of the model, and increases the ability to face ethical dilemmas. As *modus operandi*, the model is immanent in taking life seriously in the digital era. With these conceptual choices our aim is to evaluate the experiences of implementation of the model. The research question we aim to answer in this study is the following:

What are the experiences of implementing the ethical operational model in continuous learning in social and health care?

## Material and methods

To approach the research question of the study methodologically, we apply qualitative evaluation. The societal need to find evidence for how a chosen policy or program takes effect has given rise to development of various ways to do evaluation [23-25]. Increasingly, the approaches recognizing the complexity of the current operational environment have gained foothold in the field. Hence, systems thinking, and systemic approaches have been utilized to enlarge and deepen traditional approaches relying mainly on linear logic. This implies a fundamental shift: The outcomes are understood not only as something defined in the project plan but as real-life changes. Similarly, the results are not so much understood as predetermined and fixed but rather as emerging and changing [26].

As evaluation methods in our study, we use both the program theory-based logic model, and systems approach. We find this choice congruent with the approaches utilized when co-creating the ethical operational model during the SotePeda 24/7 project as described earlier. Firstly, we utilize program theory to itemize how the model has been used in continuous learning in social and health care since the model was launched in 2020 [27]. Secondly, we complement the program evaluation with systems approach to scrutinize the model in terms of its systemic potential as *modus operandi* for ethical action in the digital era [26].

As material of the study, the experiences gained from the use of the model in education and project activities are addressed [9,28,29]. Additionally, the model as an artefact and the developmental process to construct it, as well as the multifaceted data gathered during the SotePeda 24/7 project are used [5,6].





## **Results**

## The ethical operational model systematically used in continuous learning

The ethical operational model [5,6] has been utilized in educational settings in Finland from 2020 onwards. The linear process starting from the launch of the model is summarized in the form of logic model (Table 1).

The ethical operational model made available for open access is the focal input that has enabled the activities itemized in table 1. In that phase, the model as an artefact with concise meaning was ready for dissemination in its primary sociocultural setting in education. During the SotePeda 24/7 project, a massive open online course (MOOC) in the scope of 2 credits (ECTS) was built for studying the model [30,31]. Person who has completed the MOOC is familiar with the whole of the conceptual model, which includes the reflective process at the core of ethical action. In addition, the person identifies the factors that guide and promote ethical activities. After completing the course, the students can apply for Open badge of the ethical operational model to verify their

credits. The MOOC was during the spring term 2021 organized by Karelia University of Applied Sciences, and after that by Häme, Diaconia and LAB taking turns as responsible organizers. The overall feedback of the first courses has been positive. The MOOC has been described as interesting and eye-opening for the breadth of ethical issues of digitalisation in social and health care [9].

As another activity, a new project, Uusille Urapoluille DigiSote Osaamisella – UUDO in 2021–2023 [28] utilizes even other results of the SotePeda 24/7 project to realize specialization studies in the field of social and health care (30 credits) to be utilized nationally: Multisectoral competence in developing social and health. The target group of the UUDO project is the professionals working in the field, who need competence in using and developing digital services. An additional target of the project is to raise interest for the content of the work to diminish the threat of shortage of workforce in the field. As part of the specialization studies Diaconia and Häme Universities of Applied Sciences realize a study module Ethical competence (2 credits), that builds further on the content of the ethical operational model and the MOOC described earlier.

**Table 1.** The ethical operational model in continuous learning in Finnish social and health care.

Inputs	Activities	Outputs	Outcomes	Impact
The model is launched in 2020 as a result of SotePeda 24/7 project.  The model and related materials were made available for open access.	Education of the model has been organised in form of MOOCs since 2021.  A new project UUDO (2021–2023) has utilized the model in developing specialization studies.	The students have gained study credits  The students and teachers have gained experiences of continuous learning as the model has been utilized in education.	Based on the feed- back gathered of its use, the model has broadened the un- derstanding of ethi- cal issues in digitizing social and health care and given support to deal with related ethical dilemmas.	The model is available for open access and has been used actively in continuous learning.  The model has potential for societal impact.





As outcomes of using the ethical operational model, the feedback received from participants in educational activities indicates increasing awareness and competence of ethical issues related to the digitising social and health care [9,22]. This actual benefit suggests that the model is viable and supports to take seriously the ethical issues in digitalisation. Hence, the model has potential for societal impact.

## The focal constituents embedded in the ethical operation model

As described in the previous chapter, the overall experiences of implementing the ethical operational model have been positive. To deal with evaluation in greater depth, we have utilized systems approach. Hence, the processes of implementation are not only seen as linear, but as emergent or descending; constantly evolving or declining in systemic manner. Consequently, it is reasonable to evaluate the model itself as an artefact. As the model is open access, it may be taken into active use by anyone in any chosen context resulting eventually into minor or far-reaching effects. These kinds of impacts cannot easily be tracked to their sources. Furthermore, the original purposes for how to use the model may be replaced with new ones. Hence, the model itself and the embeddedness of its focal constituents are of systemic interest. In the following we examine the model from two perspectives.

Firstly, the reflective process for ethical action is at the core of the model. By means of reflection, both individuals and communities can engage in learning processes, in which theoretical as well as experiential knowledge are combined. Trialogical learning is the pedagogical frame of reference for reflective process of ethical action according to the model. The three phases consist of fact-finding (compare monological learning), participation

(dialogical learning), and generation of knowledge (trialogical learning). Reflectivity concerns ethical sensitivity and motivation, ethical evaluation and decision making, and ethical implementation. These reflective learning processes renew activity according to recognized needs, as well as raise competence to deal with new ethical dilemmas in the future.

The processes of co-creation and trialogical learning [32] have been described for example by Reijo Miettinen and Sami Paavola, and in terms of dialogical, digital, and deep learning by Sanna Ruhalahti [33, also 34]. Miettinen and Paavola argue, that for the transformation of human activities, an analysis and redesign of artefacts or instrumentalities is needed. With the concept of artefact, they refer to a man-made object that has a meaning and constitutes a part of our culture. They further state that in these complex constellations, semiotic and practical functions are intertwined in many ways.

Secondly, the core of the model is surrounded by layers and circles illustrating the changing operational environment. In this respect, systems view as an inherent feature of the model provides a framework for identifying current ethical dilemmas and phenomena in broad enough manner. For the model to have influence in social and health care, as well as in the multidisciplinary collaboration related to the work processes in these fields, to acknowledge the limits of human observation and action, as well as their influence in our reflective processes and shared conversations, is of importance. Drawing on the long tradition of systems theories [compare 35], Bernard Scott [36, also 37] has formulated five "Laws of Observation and Action" as follows:

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- 1. There is always a bigger picture.
- 2. There is always another level of detail.
- 3. There is always another perspective.
- 4. There is always error.
- 5. There is always the unexpected.

Similarly, to the laws of observation and action, the ethical operational model reminds us of many uncertainties related to our observations and interaction with environment. The application of the model is strongly related to ethical activities in a digitising operating environment. The model allows to look at the phenomena of the digital society and the world in a broad and future-oriented way. Reflecting on one's own ethical behaviour is a central part of applying and internalizing the model. Person understands the importance of ethical action and the factors influencing it in a digitising operating environment and has gained an understanding of how an ethical approach can support the resolution of ethical dilemmas.

The usability of the model in practice needs to be viewed in terms of whether it gives support for ethical evaluation, decision making and action when facing new dilemmas. The results and the feedback from the field of further education in social and health care are encouraging. As a conclusion of our evaluation, we state that the experiences of implementation of the ethical operational model have shown that the model provides means to develop capabilities to engage in reflective processes of ethical action. To what extent the model has influenced the socio-cultural reality in the field and beyond, is more difficult to evaluate. Nevertheless, our scrutiny of the model as artefact, and of its inherent constituents, such as trialogical learning, augurs well for the future: The model may adjust to change and be developed further and gradually become infused in practices and be vitally present in action as *modus operandi*.

## Discussion

During the development process of the ethical operational model, the discussions, data and reflections showed its broader possibilities in social and health care, as well as in diverse working life environments. From the beginning it was clear to us that we were developing the model by cocreating with the partners from working life and with the students. The users' perspective must be in the centre of all social and health care development processes if we want the best value for the new models or new services. [1,12]

The feedback we have received from social and health care students and partners from working life after launching the model in 2020 indicates that the ethical operational model itself gives concrete tools for difficult working life situations. Even though the idea was to develop the model for pedagogy purposes, the partners from working life have been very interested in its possibilities. For example, in 2021 the presentation of the model in telehealth conference in Oulu, Finland, aroused a lot of discussion, questions, and showed the need of ethical frameworks and models in clinical practice [29]. There are not many multiprofessional models for ethical operations for integrated social and health care [38-40]. Also, in education the virtual learning environments are developed and games combined to different tasks to bring different courses to life [33]. Hence, the ethical operational model and its constituents have practical impact. The significance of reaching the mode of modus operandi [7,8] in ethical action in the field of education and beyond is increasing.

The ethical operational model enables the interdisciplinary reflection of ethics. Considering ethics,

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the shared understanding grows and enables trialogical learning. So, we state that the model is largely based on pedagogy [32]. Furthermore, the systemic constituents of the model function as encouragement to recognize the limits of our human observation and to search for collaborating when facing dilemmas in the era of digitalisation [37,38]. Ethical reflection [41] is thinking the perspective and examining assumptions about the situation by recognizing ethical conflicts and identified professional roles. Systematic using of the ethical reflection supports the professional's development of their self-awareness and self-assessment [36].

We all work currently as teachers, being responsible for the content of many courses provided for the students of social and health care. In these roles, as part of the learning ecosystems, we need to orientate us to the future of the work in this field, so that we can support the education of the new graduates for them to develop adequate qualifications to meet their responsibilities as professionals [22,42]. In that sense, we have a need to address the content of the model in our daily work, and make ethical choices based on our observations. The model as an artefact offers support in the processes for how to communicate its simultaneously practical and profound essence.

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Based on our experience in constructing the model and re-examining it in this article, we conclude that there are many possibilities to develop the ethical models further as well as to approach them as research objects. The ethical operational model is still a prototype, why it is necessary to find organizations and networks where it could be tested and developed in the future. In Finland the ongoing social and health care reform [43] could enable the continuous development work of the model at work and in education. By seizing the opportunities of co-creation, these processes as such may be valuable for practice. We cannot know what will happen in the future, but we can try to be aware of what is to come: The ethical operational model will support our reflection in these new challenges.

#### **Conflict of interest**

The authors have no conflict of interest.

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