



'I Try to Remember That This Is Temporary': Continuous Balancing in Remote Students' Everyday Life

Maria Peltola¹ · Teemu Suorsa¹ · Jussi Silvonen²

Received: 20 May 2021 / Revised: 21 July 2021 / Accepted: 28 August 2021 /
Published online: 17 September 2021
© The Author(s) 2021

Abstract

This paper focuses on the process of development in remote and hybrid learning contexts in university students' everyday life. Development is seen as a change in the person-environment relationship and indicates the development of the whole system. To understand development, we need to look at everyday life and participants' grounds for action in everyday practices. The process of development is explored from the systemic person-environment perspective using cultural-historical concepts. Our understanding of students' everyday life and empirical research processes has been strongly inspired by the subject-scientific approach. The research material consists of descriptions from 39 university students' descriptions about their everyday lives while studying at home. The students observed and wrote about the conduct of everyday life as part of their studies. In a student's everyday life, development occurs in relation to multiple conditions and meaning structures, which—from the standpoint of the subject—are seen as possibilities for action and experience. The results reveal four general ways of relating to the surrounding conditions and possibilities. Further, the results highlight the role of open spaces and structures in development. Remote students' four ways of relating to possibilities for action are (1) balancing, (2) floating, (3) paralysing and (4) redefining. The study brings critical insights into continuous balancing and regulating of the demands between different life scenes and highlights the crucial elements of technology-mediated remote life in general: participations, transitions and the paradox of flexibility.

Keywords Conduct of everyday life · Development · Hybrid studies · Remote studies · Social situation of development · University studies · Zone of proximal development

✉ Maria Peltola
maria.peltola@oulu.fi

Teemu Suorsa
teemu.suorsa@oulu.fi

Jussi Silvonen
jussi.silvonen@uef.fi

¹ Faculty of Education, University of Oulu, P.O. Box 2000, 90014 Oulu, Finland

² University of Eastern Finland, Joensuu, Finland

Introduction

Lifelong learning and new, flexible and hybrid technology-mediated ways of studying make distance and remote studies a part of many adults' everyday life (OECD, 2019). The phenomenon is topical, although distance learning as such has a long history (Harasim, 2000), and learning is a fundamental psychical process throughout the human life course (Järvillehto, 1994, p. 187). We build on the understanding that development means continuous change and reorganisation of the intertwined person-environment relationship (Järvillehto, 1994, 2009; Roth & Jornet, 2017; Suorsa, 2019) and takes place in our everyday life (see Holzkamp, 2016; Schraube & Højholt, 2016). In practice, it means that the entire person-environment system develops (Roth & Jornet, 2017). Learning and development always happen within their context and in the middle of surrounding conditions (Holzkamp, 2016; Lave & Wenger, 1991; Schraube & Marvakis, 2016). Conditions refer to any aspects or elements that are relevant in particular situation. For example, in a student's everyday life there may be material conditions, such as technological devices, suitable furniture or a peaceful place for study. In addition, there are societal and social relations, role expectations, rhythms and habits with their own history.

In this research, remote studying refers to situations in which studies can be completed outside of the campus through distance learning, but where the students have a peer group to which they belong. During the COVID19-pandemic, students, teachers and many working adults worldwide came familiar with remote and technology-mediated ways of participating and being connected with each other. In post-pandemic hybrid learning, aim is to combine 'the best of the both worlds', enable studying and meeting in-person but also maintain flexibility of remote studying (Nørgård, 2021). The main barrier to participation in learning in adulthood is stated to be a shortage of time in relation to either work or family (OECD, 2020). The development of information technology and distance, remote and online learning seem to have great potential in overcoming these barriers. Different options to study flexibly are both crucially important and place demands and increased responsibility on the individual to organise, regulate, master and balance different life parts (Nørgård, 2021; Romero, 2011; Saari, 2016).

An increasing amount of research has focused on more effective balancing, like self-regulation in learning (Pintrich, 2000; Winne & Hadwin, 1998). Research on remote studies has often focused on students' personal characteristics in managing their studies (Wang et al., 2013) and typical difficulties and solutions when studying remotely and at home (Sun, 2014). In relation to learning environments, the focus has been on teaching methods or actions and items that promote improvements in students' achievements (Chen & Wang, 2016; Sun & Chen, 2016). Enhancing and heightening balancing strategies with changing situations has been an interesting topic for both education and work life. Previous research has also enhanced the understanding of the social aspects of the processes (Panadero & Järvelä, 2015). This has further called for the development of learning activities that support students' cooperation, participation and communality in online and remote settings (Chatterjee & Correia, 2020; Trespalacios et al., 2021).

Yet, the everyday life perspective and human life with its relations often remain cut off from the research setting. In empirical research, the focus is mostly on events in one particular observed moment—observed and analysed by the researcher. This can leave out some aspects of human life, such as the groundedness of the subject's actions, surrounding and historically formed meaning structures and everyday practices within cultural and societal conditions. The shift from face-to-face to remote learning is more than just highly

developed activities in a web-based learning environment. Students' actions are not causally determined by digital solutions and other methods in teaching (Schraube, 2013). The solutions chosen create a spectrum of possibilities for the student, preventing some possibilities and allowing others (Schraube & Marvakis, 2016; see also Tolman, 1994). Each environment, like the learning environment, opens up to the student as meaning structures and possibilities for action (Chimirri & Schraube, 2019; Schraube, 2013). Using the words of Tolman (1994), we could say that technology-mediated and flexible ways of studying create large subjective possibility spaces. At the same time, they may paradoxically narrow some aspects of life by allowing the simultaneous presence of multiple possibilities, which can make it harder for students to focus on realising certain possibilities of action (Rosa, 2016).

This article is part of a research project that focuses on the remote student's everyday life and agency. Thirty-nine university students who were engaged with remote studies observed and wrote about their everyday life at home. This research was carried out during the years 2018 and 2019, before the COVID19-pandemic. The research setting corresponded to the general situation of hybrid lifelong learning, as the students engaged in a combination of remote studies and in-person meetings. Instead of only highlighting the efficient balancing between different possibilities in students' lives, we look at the everyday life issues and aspects that they balance and their grounds for action in practices of everyday living. The overall groundedness is approached through the participants' subjective grounds—or reasons—for action (Silvonen, 1991; Suorsa, 2015). Our aim is to understand the dynamics of development in everyday study-related practices when studying at home and the students' relationships with their surrounding conditions. First, we form the overall picture of remote students' everyday life, and based on that, we ask our main research question: How do remote students relate to their possibilities for action in their everyday life?

Theoretical Framework

To explore development as a process of the whole system, we use the theory of the *organism-environment system* (Järvilehto, 1994, 2009) as a starting point. In this article, we use the expressions *person-environment system* and *relationship*. The person-environment system is in a continuous process of organisation towards producing results of action (Suorsa, 2019, p. 203). The subject is the system in action, and development refers to the development of the whole system (Järvilehto, 2009; Suorsa, 2019; see also Roth & Jornet, 2017). *Subject-scientific* (Schraube & Højholt, 2016; Schraube & Osterkamp, 2013; Silvonen, 1987; Suorsa, 2014) and *cultural-historical* theories (Valsiner, 1987; Vygotsky, 1978) are chosen here to guide the research process and for more detailed analyses of everyday life and its groundedness. Common to these theoretical backgrounds and in addition to their historical roots is seeing the environment as possibilities for action, not as a passive background. Human experience is understood as a unique relation to a shared world.

The theoretical framework of this research consists of two parts. First, to capture even partially the subject's experience and to do research from the *standpoint of the subject*, we need to explore both everyday life and the groundedness in it (Dreier, 1999, 2011; Holzkamp, 2016; Schraube & Højholt, 2016). We briefly introduce the concepts *conduct of everyday life* and *fabric of grounds*, which were presented in the same way for the research participants—the students—during the research process. The student's everyday life forms the social situation of development. Second, we introduce Valsiner's zone concepts (1987). The concepts

are adopted here to better recognise and explain the meaning of space and structures in the process of development in the life of remote students.

Everyday Life and Its Groundedness

A student is always in a certain place or a certain life scene, such as work, home or school, or participating in a hobby (Dreier, 1999, 2011). The assemblage of current life scenes and relationships forms *the social situation of development* (Suorsa, 2018; Veresov, 2004). In a particular life scene, the student is involved in certain social practices, surrounded by particular conditions, historically developed possibilities and meaning structures — different possibilities for action (Dreier, 1999; Holzkamp, 2016; Suorsa, 2014). *Conducting everyday life* requires reconciling different participations and the negotiation and organisation of various possibilities (Holzkamp, 2016). Students participate in maintaining and changing their conditions through everyday practices (Suorsa, 2019). This reorganisation of ‘functional systems’ in person-environment relations is a continuous process (Järvilehto, 1994, p. 28).

Participation in a certain scene of everyday living always has a historical and translocal dimension (Dreier, 1999; Suorsa, 2014). Historical dimension includes both the subject’s own history — a compilation of life scenes and previous situations — and the history of surrounding conditions, such as places, roles and the societal and cultural elements that shape the current situation. Translocality refers to movement within and between different scenes of life, as well as the skills required for this movement (Dreier, 2011). Using the concepts of the organism-environment theory, it can be observed that as the subject moves from one scene to another and towards new expected results, new functional systems emerge with differing components of the environment. Information technology changes translocality and the dynamics of participation such that we can participate in several life scenes simultaneously. This shift can also be seen in the everyday life of university students. Home, as their physical (learning) environment, connects the student with surrounding conditions and objects. Even in contact teaching, the teacher can never be fully aware of which elements in a student’s environment are relevant and in what sense (Holzkamp, 2016; see also Chaiklin, 2003; Veresov & Fleer, 2016). The situation becomes even more complex with distance learning and the development of technology (Chimirri & Schraube, 2019).

It is possible to clarify the social situation of development from the standpoint of the subject by exploring the participants’ subjective grounds for action in their practices of everyday living (Silvonen, 1991; Suorsa 2015). Focussing on the grounds of one’s own action and experience expands the knowledge of the subject and the world (Osterkamp, 2009). This is central to subject-scientific research (Holzkamp, 1987; Suorsa, 2015). First, it means focusing on grounds, which can be brought up when the researcher asks a question. Second, participation in the scenes of everyday life always has sides and aspects of groundedness that the subject is not aware of. This groundedness can be grasped, for instance, in counselling conversations (Raetsaari & Suorsa, 2020), in therapy (Suorsa, 2015) or in the teaching and research process, as we have done in this research. The subject’s actions may not always be rational from a particular perspective, but actions and non-actions are still grounded in different ways. This groundedness can, at least in principle, be understood in relation to the surrounding conditions and common meaning structures (Suorsa, 2015).

In this research, we identify subjects’ participations in their scenes of everyday living as fabrics of grounds (FOG, Begründungsmuster). FOG also refers to the often-foggy compilation of grounds, which become clearer when describing participation and the conduct of

everyday life, including routines, practices and meaning structures. FOG conceptualises the subjective functionality of the subject's experience and opens up the relationship between meaning structures and grounds for action (Holzkamp, 1987; Markard, 1993; Suorsa, 2015). In this research, it means the students' various ways of seeing possibilities and restrictions in their everyday life situations and relating to the surrounding conditions. The researcher focuses on (1) descriptions of a particular situation and the surrounding conditions; (2) the participant's thoughts, feelings and actions; and (3) articulations of grounds (Raetsaari & Suorsa, 2020; Suorsa, 2014, 2015). In subject-scientific research, analysing is done together with participants, whenever possible. Focusing on everyday life routines and participations makes everyday situations visible and helps both the researcher and participants to grasp the embedded groundedness behind the subject's actions and non-actions.

Zones, Spaces and Structures in the Development of the Person-Environment System

To explore the development as a process of the whole system, we need to look at the dynamic and intertwined person-environment relationship. *'Indeed, in a zone of proximal development what develops is not just one person, but life develops, resulting in the unfolding of both cultural and personal possibilities'* (Roth & Jornet, 2017, p. 149). In this article, we suggest that the development of the whole person-environment system can be explored further with cultural-historical concepts. We have chosen specific concepts to reveal the relation and meaning of space and structure in development. We also use the word *space* to refer to freedom and free movement between different conditions and structures. In general, cultural-historical concepts direct our attention towards the cultural and societal aspects of human development—often in a more refined manner than the concepts of the organism-environment theory.

The zone of proximal development (ZPD) refers to the distance between the subject's actual developmental level and potential development (Vygotsky, 1978, 1986). Following Valsiner (1987), Goos and Bennison (2019) define the ZPD as a set of possibilities that is realised when people negotiate their relationships within the situation and environment and with the people in it. ZPD is formed through (1) guidance and teaching, (2) the environment and (3) the subject's own actions (Valsiner, 1987). Veresov (2004) writes that goals and objects emerge in everyday situations and reveal the contradiction or difference between actual and potential development. New goals emerge as the results of action, and results further *'organise the person-environment system and its potential for future behaviour and future results'* (Järvillehto, 2009, p. 116).

Valsiner's (1987) zone theory is used here to clarify the meaning and dynamics of structures and space for free movement in the student's everyday life and the development of the whole person-environment system. The theory describes the interaction of education and teaching situations with the *zone of promoted action* (ZPA) and *zone of free movement* (ZFM). The ZPA is created and formulated by the teacher in a particular situation. This includes the teacher's active or intentional activity, instructions, guidance, stimuli or objects that promote, encourage or restrict the student (or pupil) to direct his or her own actions in a particular direction. This forms the structure for the development.

The ZFM, on the other hand, refers to the individual's possibility to move freely and choose objects of one's actions, within certain limits (Blanton et al., 2005; Valsiner, 1987; see also Holzkamp, 2016). El'konin (2001) describes how the action-non-action sequence in interaction creates a developmental moment. Following both El'konin and Valsiner, we note that open, empty space is central to the dynamics of development.

The ZFM defines the area of possible actions, availability of facilities or equipment and the appropriate modes of action. It is not just endless free space but is always framed by material conditions, such as classroom walls or the available technology, as well as cultural meanings previously internalised by the subject and the expectations created by others. If there are many restrictions and instructions, the activity is highly structured, and space for free movement is very limited (Valsiner, 1987). In short, the ZFM represents what the environment allows for the subject (Goos & Bennison, 2019), and the ZPA refers to the activities, sites or areas in relation to which the activity is encouraged or promoted.

The ZPD takes shape in the middle of these zones and represents new opportunities to develop, learn new things and form new goals and practices (Goos & Bennison, 2019). Development and learning are organised through these zones and need both space and structure. As development and learning proceed, the subject internalises previous ZPAs or parts of them and learns to position the ZFM in his or her own thinking, actions and feelings (Valsiner, 1987). This creates the subject's own perception of what is tolerable or desirable. For example, prevailing discourses create and shape zones of promoted action and, as they internalise, form the individual's internal boundaries of free movement — what he or she finds possible in a particular environment.

In the context of highly developed technology and lifelong learning in an adult's life, we need to note that adults also create ZPAs by themselves. They organise their lives, make choices and to-do lists and set goals, deadlines and alarms — in short, modify their conditions in many ways. We could also use the concept of affordance when referring to all the action potency in the student's everyday life (Pedersen, 2015; Pedersen & Bang, 2016; Schraube, 2013; see also Järvillehto, 2009). However, as others have stated earlier, our research process shows that in our everyday life modern technology does more than just 'afford' (Schraube, 2013).

The Research Process

Our research question was: How do remote students relate to their possibilities for action in their everyday life? In the process, our aim was not only to learn from the students' experiences but also to support the students in exploring and understanding their own everyday life and its relations (Højholt & Kousholt, 2019) and make the process and its results helpful and valuable for the participants (Chimirri, 2015). The subject's experience is embedded in the cultural, material and societal environment in many ways, which is why we must focus on everyday life (Busch-Jensen & Schraube, 2019; Schraube & Højholt, 2016). We explored the student's everyday life and social situation of development by focusing on the fabric of grounds articulated in the student's descriptions of their everyday life (Suorsa, 2015).

The research was integrated with university studies in the early childhood teacher education programme in 2018 and 2019. The process of producing research material and analysing everyday life together with the students was guided by certain principles: the student's own understanding is built by observing and analysing one's own everyday life, telling others about it and relating one's own description to the descriptions of others. In addition, the writing process, teaching and literature help discover new perspectives and refine one's own observations and interpretations. The first author of this article worked as a teacher-researcher during this process.

Participants

A total of 39 university students (36 female and 3 male students, aged between 22 and 50 years) participated in the research by observing and writing about their everyday life. All the participants had either chosen to study remotely or ended up in that setting at the end of their studies. Half of the students were living far from the university. They took part in blended learning programmes with web-based learning activities and contact teaching on weekends. Many of them also had other reasons for studying at home; they had chosen flexible ways of studying to better combine studies, work and family. For many of them, a flexible way of studying was the only chance to complete the university degree without moving away from home. The other half of the students had studied on campus earlier. They were in the final stages of their studies or for some other reason were studying mostly from home at the time of this research. For example, they were either studying remotely during the summer, or they were writing their final essays and theses at home towards the end of their studies. The research context and situations of the participants corresponded broadly to the larger idea of continuous and lifelong learning.

Research Process and Research Material

The students participated in a web-based course that concentrated on psychology. Among other contents, the students learned about the *conduct of everyday life* and *standpoint of the subject* and were given an assignment to write about their own everyday life. The aim of the teaching was to help them observe their situated and grounded participations in life and look into the social, societal, material, cultural and historical conditions around them, as well as into the meanings and groundedness embedded in their everyday practices. Conversations in a peer group, also web-based, helped the students understand theoretical concepts on a more practical level. It created a place for shared knowledge creation and room for sharing their experiences with peers and getting support from the teacher-researcher (Højholt & Kousholt, 2019).

The content and structure of the teaching and research were planned such that the participants could benefit from the process (Chimirri, 2015). According to the feedback, early childhood education students enjoyed the chance to observe and explore their own life for a change (and not always that of children) and at the same time, gather important theoretical knowledge they could use in future, actual work with children. The process is presented in Fig. 1; most of it has also been described earlier in an article concerning agency in rural areas (Peltola & Suorsa, 2020).

The theoretical framework based on their observations helped the students, at least on some level, to understand the standpoint of the subject and describe everyday life from their own perspective (standpoint). We named this phase analysis 1. This setting gave the students more freedom to analyse their everyday lives than structured research interview questions would have done. The students were informed about the research work. It was possible to choose whether they wanted their writings to only be part of their course completion requirements or also part of the research material. The teacher-researcher discussed the process with the students, including how anonymity was maintained throughout this process, as well as the findings and preliminary results. The students had a chance to develop the direction of the research. For instance, they

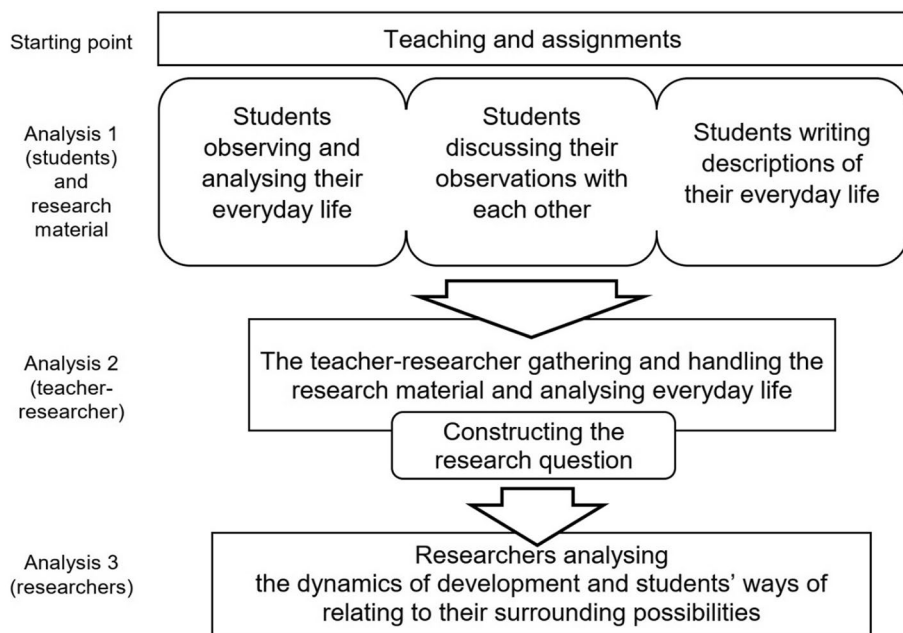


Fig. 1 The research process

highlighted the importance of certain concepts and perspectives over others and brought in knowledge and notions from their own lives that they found interesting and useful.

The research material formed in this way included 54 shorter writings from peer conversations and 39 longer descriptions of everyday life as a part of their final essays. During the phase of gathering and analysing the research material (analysis 2), we constructed the research questions based on what seemed important and meaningful during the whole process. One of the questions for further analysis and the one explored in this paper was how remote students relate to their possibilities for action in their everyday life.

The Students' Everyday Life and Further Analysis

In the second analysis, we aimed to gain an overall understanding of the research material and everyday life of students. This was done with the help of the constant comparative method (Charmaz, 2014; Glaser & Strauss, 1967; Silvonon & Keso, 1999). The first author of this article coded the material (Straus & Corbin, 1990, p. 73). Main categories and sub-categories (1–4) were created by comparing codes and units of analysis and emerged as follows: (1) The students described their conditions, including daily routines and habits, the current state of their studies and unexpected events and changes in their plans, as well as other parts and conditions of their life. (2) They described their actions, such as specific ways of organising and scheduling, setting goals, planning and regulating motivation and needs. They also described how they managed variable demands, negotiated with others and prioritised the issues in their lives. (3) They described and evaluated meanings in relation to the study content, studying and home life. (4) Many of them also analysed experienced restrictions, limitations and challenges in studying and completing specific tasks and the overall grounds, feelings, wellbeing and purposes in relation to studying at home.

Comparing this to our theoretical background, we recognised three main dimensions in students' everyday life in a remote learning context. First, there was overlapping of life scenes, which led to overlapping of participations and engagements. Second, physical transitions shifted to transitions from one web browser tab or file to another. Third, surrounding possibilities and flexibility created a paradox in everyday life practices. These three aspects also formed the social situation of development for students. But what happens in practice in everyday situations, which are strongly formed by participations, transitions and different possibilities? In the current research, we further analysed the process of development in everyday life by focusing on the students relating to different conditions and possibilities for action (analysis 3). This question especially illuminates the third perspective of everyday life mentioned above: the paradox of possibilities. At the same time, the question is grounded by those two other dimensions: the overlapping of participations and the transformation of transitions.

To reveal the relation of space and structures in the development in more detail, we used the ZPA and ZFM concepts. In the third analysis, we read the research material and theory side by side multiple times to recognise the students' descriptions of space, structures and grounds. We recognised four different ways of relating to possibilities for action, named them and wrote descriptions of each. To present the results, we have chosen samples from the research material.

Multiple Zones of Promoted Action (ZPAs)

The development of the person-environment system happens in relation to possibilities for action — the surrounding conditions, meanings and structures. Development requires both space and structures. In previous studies that use Valsiner's (1987) theory, the ZPA is described as a single area built by a teacher, which can be observed at a given moment, such as in the classroom (Blanton et al., 2005; Goos & Bennison, 2019). We could also observe its formation at a certain moment in a particular online teaching situation by looking at the instructions given by the teacher and the space left for the student. In this study, however, we looked at remote learning and the formation of zones from the perspective of the student's everyday life and the social situation of development. The difference between these perspectives and the formation of the ZPD is illustrated in Fig. 2. Using circles (different zones of promoted action) — while describing the theory — helps illustrate, but at the same time it simplifies the multidimensional and dynamic process (Galligan, 2008). The pattern in Fig. 2 are selected from the research material and compiled into one model case for a demonstration of the theory.

A single zone of promoted action can consist of a current, ongoing part of one course, such as the lecture. Other ZPAs arise from the assignments and instructions given by the teacher. The student has opened those during the lecture on adjacent tabs or as files. There is a peer discussion task in a web-based learning environment, and there is an essay that was interrupted when the lecture began. Another student has started planning group work and is looking for a suitable time for cooperation, which is why messages start arriving on the phone. Some days may also include home duties while studying. The most frequently mentioned tasks at home were laundry, preparing a meal and going out with the kids or dogs. From a systemic perspective, each zone contains multiple components of the environment; this forms the functional system according to expected results. Possible ZPDs (1–3) are illustrated in the Fig. 2 and discussed in the next chapter.

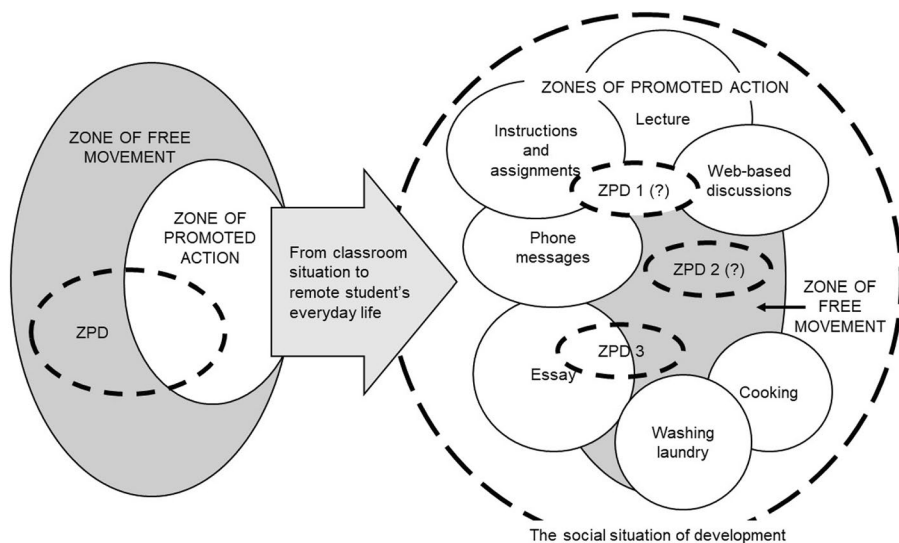


Fig. 2 Zones of promoted action and the formation of possible zones of proximal development in a classroom situation (see Blanton et al., 2005) and in everyday life perspective

All these zones of promoted actions (and components of the environment) formed the objects and areas of activity. In line with those, the student should act in order to produce certain results or meet the requirements included in certain participations in life. The surrounding possibilities for action are not just stimuli that produce a reaction; rather, the conditions form meaning structures to which the subject relates (Schraube, 2013). For example, doing crafts during the online lectures had meanings, such as making better use of time or sometimes even an increase in concentration: *'Crafting [-] keeps my hands moving and gives me the feeling that even if I am "wasting" my time by just sitting, I am still getting something done all the time'* (Student 2). In the everyday life of a remote learner, when participations and life scenes overlap, there can be several zones of promoted action simultaneously present. In addition, as mentioned earlier, adults also create these zones by themselves. In this research, this means scheduling and organising studies, as well as encouraging and sometimes forcing oneself to act.

Space for Development

Outside of the variable zones of promoted action, there should be some space left — the zone of free movement. The ZFM is always based on the relationship between the subject and surrounding structures, cultural meanings and knowledge concerning past situations (Valsiner, 1987). With the help of zone concepts, we recognised four different ways of relating to structures and space, surrounding conditions and possibilities for action: (1) balancing, (2) floating, (3) paralysing and (4) redefining. The same student could crisscross between these at different times. The different ways of relating are described in Table 1.

Table 1 Ways of relating to possibilities for action in remote students' everyday life

Ways of relating	(1) Balancing	(2) Floating	(3) Paralysing	(4) Redefining
Description	Reconciliation, stretching, struggling, inadequacy, doing many things at the same time (multitasking), trying to meet all requirements	Difficulty in grasping anything new, sticking to old routines and trajectories (staying in the comfort zone)	Stopping, pausing, braking, sticking to old routines and trajectories or seeking stability from them	Making choices, prioritising, renegotiating roles, delimiting and organising, constructing transitions
Typical grounds	Temporality of the situation Previous success and capability to balance and struggle	There is still time left I do not know where to start	I do not know where to start If I choose something, I feel I should always be doing something else	I try to finish one thing before I start a new one I made a choice when I decided to start studying I need to prioritise
Relation to zones of promoted action (see ZPD-circles in Fig. 2)	Reconciliation of different zones	Rejecting or abandoning new zones or staying at a distance from them	Rejecting both new and old zones	Evaluating and making choices between different zones of promoted action
Relation to zones of free movement	Space left randomly or not at all	Too much space	Limited space, a lack of space or too much space	Intentional clearing and organising of space or structuring made through transitions or social relations and participation

Balancing

We named the first way of relating surrounding conditions and possibilities for action as balancing (1). The characteristic for this stance was to attempt to reconcile different participations and zones of promoted action. The students' descriptions of their everyday life included stretching, doing many things at once and often experiencing inadequacy. The student was trying to meet all demands by reconciling different zones and actively balancing them. In relation to one particular task, space can be optimal; the demands can meet students' capabilities and new contents are in the ZPD (Chaiklin, 2003), and yet, the situation from the everyday life perspective can be challenging. Space is left randomly; it is limited or there is hardly any of it left (see the ZPD-circle 1 in Fig. 2). If an empty moment emerges, it tends to fill up quickly with something else (Hyyppä, 2016). To describe this using zone concepts, it seems like the ZFM is squeezed between several zones of simultaneous and overlapping promoted action. In addition, space is formed by internalised former zones of promoted action, such as expectations and demands concerning family roles, free time, recovering and home time in general. The main argument as a ground for one's actions was that this situation is temporary (even though in many cases it lasted years):

'Undeniably, my studies have also contributed to the fact that sometimes there is no decent food and children's homework is not done. With the headphones on, I try to

listen to both the child and the lecture, and I can't hear either. I try to remember that this is temporary' (Student 3).

The students' grounds and premises showed that good skills and capabilities as well as previous experiences of success could promote students to the balancing stage:

'If necessary, I can also write an essay in the evenings and at night; after all, I have done so before. I can manage with less sleep for a few nights. Past successes have increased my self-esteem and my ability to trust myself and I believe that I can survive writing an essay even when time is short. Thanks to my previous education, I know that I am able to write essays, and I have the necessary knowledge to do so. I know that I have a high level of stress tolerance, and I know that I can also cope with writing under stress and that I can recover after the situation' (Student 9).

For a student studying full-time alone at home, everyday life can also be filled only with studies and the structures and functions involved in them. Studies, with all their components, can be possibilities for action that are continuously around: *'Studies hover around in our living room as long as those are unfinished' (Student 23).* Other home functions and action potency may remain in the background, and the attachment to them will dim:

'Studies and unfinished assignments are in my mind almost all the time. Every now and then, I notice that I have difficulties concentrating on anything else, relaxing and resting. It helps if I leave home for a while and go for a walk with a friend' (Student 11).

According to Valsiner (1987), ZFM is limited by material and cultural conditions and as a result of others' and the student's own meaning structures (see the outline of ZFM in Fig. 2). Such structures include the daily rhythms of the lives of other family members, how long their child napped, work and study leaves and other home conditions, such as the possibilities of arranging a peaceful time and place to study. Previous ZPAs, which have internalised, form the boundaries of ZFM in individual thinking (Valsiner, 1987) and produce a variety of meanings, premises and grounds in everyday life, such as perceptions of what is possible or impossible and on what basis (Tolman, 1994). Zone concepts help to recognise historical and cultural aspects in grounds for action. This aspect can be easily left out in research focusing on issues happening at one particular moment, even though different meaning structures are a solid part of human life all the time. Balancing was often about reconciling previous, already internalised roles, patterns and expectations, as well as new requirements, so that the individual strived to fulfil them all and stretched alternately in every direction.

Floating and Paralysing

In the second and third ways of relating, the central difficulty was to stop and stay in front of any new zones of promoted actions (see the ZPD-circle 2 in Fig. 2). Typical for floating (2) was the difficulty in attempting anything new. The student keeps a distance from new structures, contents or tasks and sticks to old routines and trajectories. A few students described staying in the comfort zone. The student's description here includes floating along with everyday routines but also maintaining meaningful aspects and participations of everyday life:

'I continued working, coming home, playing with my child and doing everyday routines. Almost every night, I remembered the assignments, but I was too tired to

engage with the situation. I could not even entertain the thought of moving to my laptop. [-] It was easier for me to push those thoughts to the back of my mind and lie on the floor as a boat for my child. I continued in the same way almost all summer' (Student 23).

It was common to wait for a tighter structure formed by the peer group or for the deadline to come closer: *'Because of the work, flexibility is good, but in the end, it's been too much for me. If I know that the deadline is flexible, I just keep moving the task forward'* (Student 40). From the ZFM perspective, there was usually too much freedom and space. The basic ground was that there was still time left or the student did not know where to start. Many of them also recognised different possibilities for action: *'I find myself often in need of more boundaries, guidance, and "compulsion", and I get anxious about boundlessness; too much freedom, and an endless spectrum of possibilities'* (Student 34).

Paralysing (3) described a situation where there was possibly too much space and flexibility in relation to a single task, but too little in general. In this third way of relating, there seemed to be so many demands and issues that it was hard to grab onto anything — old or new:

'However, getting attached to anything is sometimes challenging when there is so much to do. There is a feeling that whatever you do, you should be doing something else, and there would always be something more important to do' (Student 2).

Sometimes paralysing was a result of previous balancing:

'I haven't been able to go deeply into anything, because I have to do too many things at the same time. [-] Overloading can easily occur during a too tight or heavy pace of study. Then you may have to put a stop to everything for a moment, even if you don't want to. For myself, this alternation of intense periods and breaks has turned out to be almost [continuous]' (Student 15).

Redefining

Many students described that during their studies they had developed in clearing the space required for their own studies. The fourth way of relating, redefining (4), involved making choices and prioritising, renegotiating roles and organising the space in different ways. This meant both organising concrete conditions, such as time and place, and negotiating one's own and others' expectations, goals and objects of actions: *'In my own life, I have had to prioritise things, whether I am making an hour-long call today to a friend or spending time with family or studies'* (Student 6).

Here, redefining also includes constructing transitions between different life parts and issues. This is especially notable in remote learning situations, where there are no physical transitions from one place to another:

'I kind of like remote learning because I save a lot of time in a day when I do not have to drive from home to university and back. However, the journey has its own good side. During the transition, I can process things that we have covered during the lectures' (Student 33).

'I've always tried to take care that the transition from work to home is the signal so that work issues do not follow the home [-] Now I have transferred my studies to another room, so that I can separate home life from studies [-] My husband installed

an extra screen for me, and we organized our guest room as the place for studies' (Student 13).

Although different ways of organising and setting goals are already central in the practical guidelines for students (as seen in previous research too), there is more depth to the whole phenomenon when seeing redefining and organising as a part of the developmental process. Renegotiating and organising changes and reforms the social situation of development (Rubtsova & Daniels, 2016). Setting goals and making decisions and actions are surrounded by meaning structures and grounded in many levels, starting from personal reasons and leading to common, cultural and societal grounds. Dreier (2003) points out that the subject's own decisions contain the possibility and resource to influence, although situations are formed by many conditions and actors. Redefining, however, is not always easy: *'Others have expectations and hopes for you, and sometimes you get the feeling that you are being selfish when you do not meet these expectations'* (Student 1).

The default assumption concerning remote and distance learning is that it gives more space and freedom if you can freely choose time, or at least place, for studying. However, as Fig. 2 illustrates, in practice, space and freedom are complex, and as groundedness in everyday life shows, multi-layered. Layers are formed not only by different meaning structures but also on the level of everyday practices. With many flexible practices, the space between them can end up being very limited. Paradoxically, from the everyday life perspective, variable possibilities can challenge space and free movement, although the primary purpose might have been to create more space and flexibility with particular possibilities. In the students' descriptions, flexible deadlines were the basic and often-mentioned examples of the phenomenon; flexibility was both important and a challenge. When facing flexible deadlines, something always comes up:

'My studying would not go forward if there was too much freedom and flexibility. On the other hand, [studying] would not happen at all if the only choice would be going to the campus. I need a specific structure for my studies, a schedule. Which always fails. In the end, the final deadline forces me to finish the assignment' (Student 1).

Here, we have described four ways of relating to space and structure. So that new developmental steps can emerge, we have highlighted the importance of both optimal open space and structures to form the content and guide the process. Even though well-planned instructions and contents are important, they are not helpful at the particular moment if they are not in relation to the student's topical and developing acquirements (Chaiklin, 2003). In order to understand how learning and development takes — or does not take — place, we need to focus on students' topical life conditions and practices.

Evaluation and Discussion

In this article, we explored the dynamics of development within university students' everyday practices in the context of remote studies and lifelong learning. Development was defined as a process where the whole system — the intertwined person-environment relationship — develops through continuous reorganisation (Järvillehto, 1994, 2009; Roth & Jornet, 2017; Suorsa, 2019). We posed the following research question: How do remote students relate to their possibilities for action in their everyday life? In the research material, remote students' social situation of development was defined by overlapping participations, the transformation of transitions and the paradox of flexibility and possibilities.

Development takes place in the middle of different possibilities for action; it involves seizing some possibilities whilst omitting others. Development needs both structure and space. As a result of analysing everyday life and groundedness through zone concepts, we recognised four different ways of relating to structures and space in students' everyday life practices, which were (1) balancing, (2) floating, (3) paralysing and (4) redefining. The research and results provide the tools for a student to analyse his/her own social situation of development in everyday life and help the teacher and study organiser to evaluate the relation of space and structures in different implementations of studies and recognise the need for support. In addition, this is an example of subject-scientific research focusing on the student's standpoint and embedded groundedness in everyday relations.

The results can be relevant even outside of the remote studying context whenever the conditions and everyday dynamics are similar to those in this study. The generalisation of the results is closely related to everyday conditions (Busch-Jensen & Schraube, 2019; Højholt & Schraube, 2019). The practices of home life change when technology-mediated and other study-related demands enter (Rai et al., 2020). Technology-mediated ways of studying do create important possibilities of combining studies and other parts of life and extend education to a larger geographical area (Bowen & Lack, 2013). At the same time, flexibility and variable affordances can lead to continuous balancing between different aspects of life. New possibilities of studying flexibly, regardless of time and place, can challenge students' engagement with their studies (Schraube & Marvakis, 2016) and increase the individual's responsibility for organising and managing everyday life (Romero, 2011; see also Saari, 2016).

In today's complex society, which offers many competing opportunities, regulation and balancing seem necessary. However, the continuous process of development is also essential to the human condition, not just regulate and balance (Järvilehto, 1994). In our fast, fluid and continuously changing society, lifelong learning and development is key, with invitations and demands to redirect attention and seize new opportunities (Hviid, 2018). There are so many demands and possibilities for action that when we are exhausted from balancing, we begin to seek to pause, stop and slow down, or we just get paralysed by everything (see Järvilehto, 1994).

During the research process, it was important to consider the meaning and purpose of the research aims, for whom it is done and the kind of impact that the process and results have (Brinkmann & Kvale, 2017; Hilppö et al., 2019). Throughout the research process, the objects related to education were primary, whilst the research objects were secondary. The teacher-researchers were primarily teachers, and the students' primary target was to complete the course. The students committed to the process and observed their own everyday lives in different ways. Some students might have accomplished the assignments with minimum resources and effort, whilst some commented and evaluated the results even after the research process and their studies. Ethical considerations were taken into account throughout the process by informing the participants about research aims, objects, purpose and stages and ensuring that anonymity was maintained. One aim was to support the active role of participants in the study, and another was to create a process and produce knowledge that is useful for participants. This research setting gave students the space to explore their own everyday practices, relations and groundedness. We also set our mind to issues that the students pointed out and discussed the preliminary and final results with them — though not all students were part of that phase.

Because of peer conversations, the research material contained some common elements or mutually inspired or promoted descriptions: someone related his or her own example based on something pointed out by someone else. Although it was hardly notable in the final research material, it was part of the socially shared understanding of life. We were not looking for an individual inner experience that would not be in relation to its surroundings. Rather, we helped participants to recognise the relations and situational embeddedness instead. Also, without taking this as a part of the process, there would have been similarities in descriptions — through influences from previous studies and shared conversations from some other situations. Therefore, we made this process visible and grounded it in teaching so that students were better able to articulate their personal experiences.

Valsiner's (1987) theory used in this study originally described child development and the child–adult relationship and interaction. The applicability of these concepts to research on an adult's life and learning and developmental processes can still be further assessed. Learning and development, however, are lifelong processes. It is easy to assume that adults have control over their life conditions. The everyday life perspective, however, shows how different participations and conditions form conscious and unconscious premises and grounds and guide subjects' choices and actions. In addition, technology shapes those everyday relations (Schraube & Marvakis, 2016). Surrounding conditions can lead us to balancing, regulating and maintaining, even in a situation where we should perhaps change and modify the original conditions, renegotiate, prioritise and make choices.

In the life of an individual, zones of promoted actions of one's own history have layered and formed internalised boundaries of activity and thinking. These are paved over by new zones of promoted actions — the demands of what one should know, do, own or be. We are trying to balance not only the demands of current overlapping participations but also, as the research material in this study shows, premises and groundedness based on our own history. Social support and structures that create safe environments in development and in taking new steps are found to be significant in many research areas (Clark et al., 2020; Mälkki & Green, 2016; Panadero & Järvelä, 2015). Social relations play a major role from *balancing* to *redefining*.

Instead of focusing only on strategies of balancing and regulating, everyday life perspective reveals the elements the subject is balancing between. It is important that the concepts and methods in research are not blind to these but rather enable future studies to focus on critical aspects of human participation in maintaining and changing our conditions of learning and living. With the concepts of organism–environment theory — What are the real results of our action? How do individuals participate in producing these results? — learning and development take place in relation to the environment, and it always means somehow balancing the requirements of studies and the demands of other life scenes (Holzkamp, 2016). Subjective functionality and the relation of maintaining and modifying conditions could be further discussed and analysed with the concepts of restrictive and generalised agency (Holzkamp, 2013; Osterkamp, 2009). When reforming everyday functions in studies, we must try to identify what kind of social situation of development is formed by learning practices and the conditions and possibilities in the midst of which development takes place (Veresov & Fleer, 2016). It is important to support students in identifying the current possibilities, restrictions and reasons for their own actions. This can help them recognise their objects of activity and how those are formed in everyday practices. It also enables students to see alternative possibilities and grounds for actions —and imagine possible worlds. From both an individual and a community perspective, it is necessary to look for what is valuable and desirable, as it is not possible or sustainable to grasp all possibilities.

Funding Open access funding provided by University of Oulu including Oulu University Hospital.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Blanton, M. L., Westbrook, S., & Carter, G. (2005). Using Valsiner's zone theory to interpret teaching practices in mathematics and science classrooms. *Journal of Mathematics Teacher Education*, 8, 5–33. <https://doi.org/10.1007/s10857-005-0456-1>
- Brinkmann, S., & Kvale, S. (2017). Ethics in qualitative psychological research. In C. Willig & W. Stainton-Rogers (Eds.) *The SAGE handbook of qualitative research in psychology* (pp. 263–279). Sage.
- Bowen, W., & Lack, K. (2013). *Higher education in the digital age*. Princeton University Press.
- Busch-Jensen, P., & Schraube, E. (2019). Zooming in zooming out: analytical strategies of situated generalization in psychological research. In C. Højholt & E. Schraube (Eds.), *Subjectivity and knowledge: Generalization in the psychological study of everyday life* (pp. 221–241). Springer.
- Chaiklin, S. (2003). The zone of proximal development in Vygotsky's analysis of learning and instruction. In A. Kozulin, B. Gindis, V. Ageyev, & S. Miller (Eds.), *Vygotsky's educational theory and practice in cultural context* (pp. 39–64). Cambridge University Press.
- Charmaz, K. (2014). *Constructing grounded theory*. Sage.
- Chatterjee, R., & Correia, A.-P. (2020). Online students' attitudes toward collaborative learning and sense of community. *American Journal of Distance Education*, 34(1), 53–68. <https://doi.org/10.1080/08923647.2020.1703479>
- Chen, H. -L., & Wang, S. (2016). Turning passive watching to active learning: engaging online learners through interactive video assessment tools. *39th Annual Convention of the Association for Educational Communications and Technology 1*, 15–20.
- Chimirri, N. (2015). Designing psychological co-research of emancipatory-technical relevance across age thresholds. *Outlines. Critical Practice Studies*, 16(2), 26–51.
- Chimirri, A. N., & Schraube, E. (2019). Rethinking psychology of technology for future society: exploring subjectivity from within more-than-human everyday life. In K. O'Doherty, L. Osbeck, E. Schraube & J. Yen, (Eds.) *Psychological studies of science and technology* (pp. 49–76). Palgrave Macmillan.
- Clark, J. C., Jacobs, B., & MacCallum, J. (2020). Solidarity and community: Collaborative learning in times of crisis. *Human Arenas*. <https://doi.org/10.1007/s42087-020-00152-4>
- Dreier, O. (1999). Personal trajectories of participation across contexts of social practice. *Outlines. Critical Practice Studies*, 1(1), 5–32.
- Dreier, O. (2003). *Subjectivity and social practice*. University of Aarhus.
- Dreier, O. (2011). Personality and the conduct of everyday life. *Nordic Psychology*, 63, 4–23.
- El'konin, D. B. . (2001). Symbolic mediation and joint action. *Journal of Russian and East European Psychology*, 39(4), 9–20. <https://doi.org/10.2753/RPO1061-040539049>
- Galligan, L. (2008). Using Valsiner. In M. Goos, R. Brown, & K. Makar (Eds.) *Navigating currents and charting directions*. The University of Queensland, St Lucia.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. Aldine.
- Goos, M., & Bennisson, A. (2019). A zone theory approach to analysing identity formation in mathematics education. *ZDM*, 51, 405–418. <https://doi.org/10.1007/s11858-018-1011-8>
- Harasim, L. (2000). Shift happens: Online education as a new paradigm in learning. *Internet and Higher Education*, 3, 41–61.
- Hilppö, J., Chimirri, N., & Rajala, A. (2019). Theorizing research ethics for the study of psychological phenomena from within relational everyday life. *Human Arenas*, 2(4), 405–415. <https://doi.org/10.1007/s42087-019-00073-x>
- Højholt, C., & Kousholt, D. (2019). Developing knowledge through participation and collaboration: Research as mutual learning processes. *Kritische Psychologie*, 16, 575–604.

- Højholt, C., & Schraube, E. (2019). *Subjectivity and knowledge: Generalization in the psychological study of everyday life*. Springer.
- Holzkamp, K. (1987). Die Verknennung von Handlungsbegründungen als empirische Zusammenhangsanahmen in sozialpsychologischen Theorien: Methodologische Fehlorientierung infolge von Begriffsverwirrung. *Forum Kritische Psychologie*, 19, 23–58.
- Holzkamp, K. (2013). Basic concepts of critical psychology. In E. Schraube & U. Osterkamp (Eds.) *Psychology from the standpoint of the subject: Selected writings of Klaus Holzkamp* (pp. 19–27). Palgrave Macmillan.
- Holzkamp, K. (2016). Conduct of everyday life as a basic concept of critical psychology. In E. Schraube & C. Højholt (Eds.) *Psychology and the conduct of everyday life* (pp. 65–98). Routledge.
- Hviid, P. (2018). “Remaining the same” and children’s experience of development. In M. Hedegaard (Ed.) *Children, childhood, and everyday life: Children’s perspective* (pp. 241–257). Information Age Publishing, Inc.
- Hyypä, H. (2016). Puheen paikka – puhekiireen aika [Place for speech – time of speech rush]. *Psykoterapia*, 35(1), 70–71.
- Järvilehto, T. (1994). *Ihminen ja ihmisen ympäristö [Human and environment]*. Pohjoinen.
- Järvilehto, T. (2009). The theory of the organism-environment system as a basis of experimental work in psychology. *Ecological Psychology*, 21(2), 112–120.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Markard, M. (1993). Kann es in einer Psychologie vom Standpunkt des Subjekts verallgemeinerbare Aussagen geben? *Forum Kritische Psychologie*, 31, 29–51.
- Mälkki, K., & Green, L. (2016). Ground, warmth, and light: Facilitating conditions for reflection and transformative dialogue. *Journal of Educational Issues*, 2, 169–183. <https://doi.org/10.5296/jei.v2i2.9947>
- Nørgård, R. (2021). Theorising hybrid lifelong learning. British Educational Research Association, 1–15.
- OECD. (2019). Getting skills right: Future-ready adult learning systems. *OECD Publishing*. <https://doi.org/10.1787/9789264311756-en>
- OECD. (2020). *The potential of online learning for adults: early lessons from the COVID-19 crisis. OECD Policy Responses to Coronavirus (COVID-19)*. OECD Publishing. <https://doi.org/10.1787/ee040002-en>
- Osterkamp, U. (2009). Knowledge and practice in critical psychology. *Theory & Psychology*, 19(2), 167–191. <https://doi.org/10.1177/0959354309103538>
- Panadero, E., & Järvelä, S. (2015). Socially shared regulation of learning: A review. *European Psychologist*, 20(3), 190–203. <https://doi.org/10.1027/1016-9040/a000226>
- Pedersen, S., & Bang, J. (2016). Historicizing affordance theory: A rendezvous between ecological psychology and cultural-historical activity theory. *Theory & Psychology*, 26(6), 731–750. <https://doi.org/10.1177/0959354316669021>
- Pedersen, S. (2015). *The ought to be, how to be, or not to be: a study of standards and subjectification processes in high school*. University of Copenhagen.
- Peltola, M. & Suorsa, T. (2020). University studies in the adjacent tab: dimensions of students’ agency and everyday life in the rural north of Finland. *Education in the North*, 27(2), 92–105. <https://doi.org/10.26203/3w82-8n53>
- Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 451–502). Academic Press.
- Raetsaari, K., & Suorsa, T. (2020). Clearing the FOG — studying personal participation in solution-focused counselling. *Career guidance for inclusive society, conference proceedings*, 393–397. Slovakia: Bratislava.
- Rai, P., Fleer, M., & Fragkiadaki, G. (2020). Theorising digital tools: Mutual constitution of the person and digital in a conceptual PlayWorld. *Human Arenas*. <https://doi.org/10.1007/s42087-020-00178-8>
- Romero, M. (2011). Computer learning environments for the development of self-regulated learning and collaborative learning in the EHEA. *EDULEARN11 Proceedings*, 5614–5618.
- Rosa, H. (2016). *Resonanz: Eine soziologie der weltbeziehung*. Suhrkamp.
- Roth, W., & Jornet, A. (2017). *Understanding educational psychology: A late Vygotskian*. Springer.
- Rubtsova, O., & Daniels, H. (2016). The concept of drama in Vygotsky’s theory: application in research. *Cultural-historical Psychology*, 12(3), 189–207. <https://doi.org/10.17759/chp.2016120310>
- Saari, A. (2016). Elinikäinen oppiminen ja yksilöivä valta [Lifelong learning and individualising power]. *Aikuiskasvatus*, 36(1), 4–13. <https://doi.org/10.33336/aik.88470>
- Schraube, E. (2013). First-person perspective and sociomaterial decentering: Studying technology from the standpoint of the subject. *Subjectivity*, 6, 12–32. <https://doi.org/10.1057/sub.2012.28>

- Schraube, E., & Højholt, C. (2016). *Psychology and the conduct of everyday life*. Routledge.
- Schraube, E., & Marvakis, A. (2016). Frozen fluidity: digital technologies and the transformation of students' learning and conduct of everyday life. In E. Schraube & C. Højholt (Eds.) *Psychology and the conduct of everyday life* (pp. 205–225). Routledge.
- Schraube, E., & Osterkamp, U. (2013). *Psychology from the standpoint of the subject: Selected writings of Klaus Holzkamp*. Palgrave Macmillan.
- Silvonen, J. (1987). Psykologia kriittisenä subjektitieteenä [Psychology as a critical subject-science]. *Tiede & Edistys*, 12(1), 56–62.
- Silvonen, J. (1991). 'Subjektiiiviset toimintaperusteet' psykologisen determinaation lähtökohtina [Subjective grounds for action as a basis for determination]. *Psykologia*, 26(1), 13–20.
- Silvonen, J., & Keso, P. (1999). Grounded Theory aineistolähtöisen analyysin mallina [Grounded Theory as interactive qualitative analysis]. *Psykologia*, 34(2), 88–96.
- Sun, S. Y. H. (2014). Learner perspectives on fully online language learning. *Distance Education*, 35(1), 18–42. <https://doi.org/10.1080/01587919.2014.891428>
- Sun, A., & Chen, X. (2016). Online education and its effective practice: A research review. *Journal of Information Technology Education: Research*, 15, 157–190.
- Suorsa, T. (2014). *Todellista on mahdollinen: Systeeminen ja subjektitieteellinen näkökulma kasvatopsykologiseen kokemuksen tutkimukseen*. [The possible is real. A systemic and subject-scientific approach to educational-psychological research into subjective experience] Oulu: Acta universitatis ouluensis. Series E, Scientiae rerum socialium 147.
- Suorsa, T. (2015). Solution-focused therapy and subject-scientific research into personal conduct of everyday living. *Outlines. Critical Practice Studies*, 16(2), 126–138.
- Suorsa, T. (2018). Kasvatopsykologia monitieteisessä kokemuksen tutkimuksessa: Kehityksen sosiaalinen tilanne ja perusteltu osallisuus elämisen näyttämillä. [Educational psychology in multidisciplinary research on experience. The social situation of development and grounded participation in scenes of everyday living.] In J. Toikkanen & I. Virtanen (Eds.) *Kokemuksen tutkimus VI. Kokemuksen käsite ja käyttö* (pp. 85–108). Rovaniemi: Lapin yliopistokustannus.
- Suorsa, T. (2019). Learning and experience. Identifying and analysing a change in an organism-environment system in counsellor training. In K. Murakami, J. Cresswell, T. Kono, & T. Zittoun (Eds.) *The ethos of theorizing* (pp. 202–211). Captus University Publications.
- Strauss, A. & Corbin, J. (1990). *Basics of qualitative research*. Sage publications.
- Tolman, C. W. (1994). Psychology, society and subjectivity. Routledge. <https://doi.org/10.4324/9780203420942>
- Trespalcacios, J., Snelson, C., Lowenthal, P. R., Uribe-Flórez, L., & Perkins, R. (2021). Community and connectedness in online higher education: A scoping review of the literature. *Distance Education*, 42(1), 5–21. <https://doi.org/10.1080/01587919.2020.1869524>
- Valsiner, J. (1987). *Culture and the development of children's action: A cultural-historical theory of developmental psychology*. John Wiley & Sons.
- Veresov, N. (2004). Zone of proximal development (ZPD): the hidden dimension? In A. Ostern & R. Heila-Ylikallio (Eds.) *Språk som kultur – brytningar i tid och rum I*, (pp. 13–30). Vasa.
- Veresov, N., & Fleer, M. (2016). Perezhivanie as a theoretical concept for researching young children's development. *Mind, Culture and Activity*, 23(4), 1–11.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Vygotsky, L. S. (1986). *Thought and language*. The MIT Press.
- Wang, C. H., Shannon, D. M., & Ross, M. E. (2013). Students' characteristics, self-regulated learning, technology self-efficacy, and course outcomes in online learning. *Distance Education*, 34(3), 302–323. <https://doi.org/10.1080/01587919.2013.835779>
- Winne, P. H., & Hadwin, A. F. (1998). Studying as self-regulated learning. In D. Hacker, J. Graesser, & A. Dunlosky (Eds.) *Metacognition in educational theory and practice* (pp. 277–304). Lawrence Erlbaum.