Teachers’ pedagogical tact in craft-art learning situations
Pathic perceiving, acting and interacting

ABSTRACT
The goal of this research is to explore how teachers’ pedagogical tact occurs in craft-art learning situations, in the context of Finnish Basic Education in the Arts, by using the grounded theory (GT) method. The theoretical concepts—the term pathic, pedagogical tact and self-determination theory (SDT) and the key concepts autonomy, competence and relatedness—have been chosen based on how they supported the data analysis. The data consisted of five stimulated recall interviews with teachers. The GT analysis revealed that teachers’ pedagogical tact manifested itself in pathic perceiving, acting and interacting. The teachers supported students’ autonomy, relatedness and competence in craft-art learning by creating an open atmosphere and caring relationships with the students to support their sense of ownership and personal resources. The results provide conceptual understanding of craft-art pedagogy.

Keywords:
craft, craft-art, pedagogical tact, pathic knowing, grounded theory
INTRODUCTION

‘As a matter of fact, I do everything but teach the craft’, stated a teacher, who works in the Finnish Basic Education in the Arts (BEA). The teachers who participated in this research considered themselves educators as well as teachers. Looking at the matter from a teacher’s perspective, we approach the craft studies of adolescents in the pedagogical environment of BEA, which is a context of craft learning not much studied. The activity in BEA classrooms is a contingent, dynamic, everchanging complexity of immediate situatedness that requires the teacher’s instant actions with insight into each student’s situation (cf. Koskinen et al., 2015; van Manen, 2008). Koskinen et al. (2015) pointed out how teaching craft knowledge included embodied interaction, non-verbal communication and mediating tacit cultural knowledge (see also Johansson, 2006; Illum & Johansson, 2012). In Syrjäläinen’s study (2003), craft teachers created a unique atmosphere with their personal way of being, speaking, acting and encountering the students in the classroom (pp. 263–264). This study focuses on the pedagogical relationship between the teacher and student, which van Manen (1994, 2015, p. 120) describes as personal, interpretive and spontaneous, where the teacher’s intent is to care for each student as they are or may become.

The creative process of craft requires the learner to perceive, imagine, reason, experiment, compare, make decisions, discover, evaluate and reflect on the process (e.g., Rönkkö & Lepistö, 2016; Ojala, 2013). Recent studies have shed light on how craft making and learning enhance students’ psychological skills, such as decision making and risk tolerance, and develop personal traits like a sense of responsibility, perseverance and patience (Häsänen et al., 2018; Rönkkö & Lepistö, 2016). The holistic craft process—designing, making and assessing—includes managing theoretical and practical knowledge in various problem-solving tasks and requires the ability to evaluate and reflect on the whole process (Pöllänen, 2009; Hilmola & Lindfors, 2017). Kvellestad et al. (2021) found that in a collaborative arts and crafts project of design education, in which the teacher’s role was to guide, facilitate and tutor, the participants’ creative abilities, cognitive skills and design literature were developed. Further, the physical interaction between the material and one’s body, the somatic experience, is the necessary basis of the craft experience; by touching the material, the student becomes aware of being in the world and is able to build oneself as a practitioner (Groth, 2016, 2017, p. 60; Shusterman, 2013). After bringing together research in design and embodied cognition and complementing the knowledge with neuroscientific experiments, Seitamaa-Hakkarainen et al. (2016) summarise that learning through craft making seems to have an essential role in human development in cognitive, spatial, motor, social and aesthetic skills, and the artistic craft processes are central to emotional expression and regulation of human well-being (see also Huotilainen et al., 2018). In light of these studies, there is a need for research to construct theoretical frames for understanding and developing pedagogy of crafts that acknowledges the holistic nature of craft making and learning.

We use the term craft–art, defined by Karppinen (2005, 2008), when talking about craft studies in the BEA context. In craft–art, the teacher tempts and nourishes inspiration, activates students’ own initiative, guides to perceive and reflect on oneself and one’s own relation to the world and provides opportunities to express something from the self through craft making (Karppinen, 2005, 2008). Studying craft–art is a voluntary, after-school activity, where students meet weekly to implement their craft projects under the guidance of professional teachers. During these long-term, goal-oriented studies, the student progress from one level to another developing their crafting competencies, starting at the age of 5 to the age of 18 or longer (Finnish National Agency for Education, 2017). According to the national curriculum of the BEA, the main objectives of craft–art are to practice students’ multi-material competence; inspire exploration; experiment; innovate ideas; encourage students to perceive and interpret different phenomena in the interdisciplinary field of craft, art, and science; and strengthen students’ perception of oneself as active, competent and creative operators (Finnish National Agency for Education, 2017).

The present study is part of continuous GT research that is divided into several stages. The previous stage concerned students’ emotional experiences and making sense of self related to craft making in the BEA. The findings of the previous stage revealed that the students’ somatic experiences and emotional ownership of the craft process could result in a transformed knowledge of self (Ojala et
This raised questions about the teacher’s deeper understanding of a student’s craft process. The categories of the previous stage of the study were found useful as a part of the analysis of the new data gathered from the teachers’ perspective that is the topic of the present study.

The research question was developed to its final form by applying van Manen’s (2008, 2015) theoretical concept ‘pedagogical tact’, which describes a teacher’s sensitivity to interpret students’ experiences and ability to intuitively know how to act and interact in the learning situations. In this article, the research question is: How does the teachers’ pedagogical tact manifest itself in the craft-art learning situations in the BEA?

**THEORETICAL APPROACHES**

In the 1980s, van Manen (1986) started to employ the term pedagogical tact to describe the teachers’ improvisational pedagogical-didactical abilities of instantly knowing how to deal with students in interactive learning situations (van Manen, 1991a, 1991b, 2008, 2015). Tact is neither a set of techniques nor a rational way to act. Instead, a tactful teacher is able to understand and interpret the student’s experience, sense the pedagogical meaning of each situation and intuitively know what to say or how to act or, in some cases, to hold back in the right moment (van Manen, 2008). Sipman et al. (2019) view a teacher’s intuition as crucial for pedagogical tact. Tact requires perceptiveness, insight, sensitivity, thoughtfulness or thinking attentiveness (van Manen, 2008). A tactful teacher has the sensitive ability to perceive and interpret a student’s inner thoughts, feelings and desires from indirect clues such as behaviour, gestures, tone of voice and body language (van Manen, 1994).

Manifestation of pedagogical tact can be described through the term pathic (van Manen 2008; van Manen & Li, 2002). The etymology of the term pathic derives from the word pathos, which in a broader life context refers to presence: the general mood and feeling and sense of being in the world (van Manen, 1999). Van Manen and Li (2002) present five modalities of pathic knowing: relational, situational, corporeal, temporal and actional. It is part of the teacher’s professionalism to intuitively understand the experienced qualities of teacher-student relations, sense the atmosphere of the lived spaces in school, be aware of one’s embodied and temporal being in the learning situations and discover the knowledge that is hidden in action (van Manen & Li, 2002).

Self-determination theory (SDT), developed by Edward Deci and Richard Ryan (Deci & Ryan, 1985), offers a broader framework to view the pedagogical environment that teachers seem to create through perceiving, acting and interacting in the studied learning situations. According to SDT, students’ autonomy, competence and relatedness are considered essential to psychological health and growth and support students’ intrinsic motivation, optimal functioning, well-being and self-actualisation (Deci & Ryan, 2000; Ryan & Deci, 2017, 2020). There are several studies that apply SDT in different school settings by outlining the elements of teaching styles that support students’ autonomy, competence and relatedness (Ryan & Deci, 2020, 2017, pp. 366–369). For example, teachers who support students’ autonomy give attention to students’ interests, are responsive to students’ ideas, provide provision of choice and encourage initiative and ownership of students’ work (Patall et al., 2013; Reeve & Jang, 2006; Reeve et al., 1999). Furthermore, autonomy-supportive teaching fosters students’ sense of competence and relatedness (Ryan & Deci, 2020). Competence is understood as a feeling of mastery, a sense that a student has a chance to succeed (Ryan & Deci, 2020; 2017, p. 11). Relatedness concerns a sense of social belonging, a feeling of being cared for and respected by others (Ryan & Deci, 2020, 2017, p. 11).

Van Manen (2008) describes teaching as a caring profession that involves creating a good atmosphere and providing students positive experiences of feeling safe and successful. Noddings (2005) defines a caring relation as the most basic form of connection between two people, where the caregiver is engrossed and receptive to a cared-for who receives and somehow responds to caring. She considers receptive listening as the very heart of caring relations and the basic attitude that characterises relations of care and trust (Noddings, 2012).

Van Manen (2008) presents the term recognition, which means a teacher acknowledges the student’s existence, their very being, and this is intertwined with selfhood and personal identity. Korthagen et al. (2014) have studied teacher-student contact, which they define as momentary mutual
experience of connection, where the teacher is aware of and present to the student’s thinking, feeling, wanting and acting in a way that the student also feels being seen, understood and accepted. Noddings (2005, 2012) adds that caring relations in a school context require continuity, frequent moments of recognition and contact between a teacher and student.

The term pathic helps bring together all those adjectives needed to describe the ways teachers perceive students, act in learning situations and interact with students. During the research process, the teachers’ perception, action and interaction were coded with descriptive adjectives such as holistic, sensitive, understanding, caring, intuitive, encouraging, approving, balancing and reflective. We found the term pathic helpful in naming the new categories with one word in a more abstract level (see Van Manen and Li, 2002). These adjectives were categorised under the umbrella of pathic perceiving, acting and interacting. We recognised that these all fit well with pedagogical tact, which refers to the teachers’ certain sensitivity and thoughtfulness (van Manen, 1991a, 1991b, 2008, 2015). Self-determination theory (SDT) and its key concepts autonomy, competence and relatedness (Deci & Ryan, 1986, 2000; Ryan & Deci, 2020) created a wider psychological frame to approach the craft-art pedagogy in the BEA.

METHOD, DATA AND ANALYSIS

Grounded theory (GT) method was used throughout the research project because it provides procedures to uncover meanings that underlie action or to examine rational and emotional aspects of behaviour (Corbin & Strauss, 2015, p. 11). Data collection was guided by theoretical sampling which means that the results of the previous stages of the research project (see Figure 1) led to a search for new data to fill the gaps of emerging theory (Glaser & Strauss, 1967, pp. 45–49; Corbin & Strauss, 2015, pp. 134–136). The GT coding and analysis were based on a constant comparative method; by asking questions and making comparisons between incidents of the data, the categories were labelled and formed (see Strauss & Corbin, 1990, pp. 61–74).

The connection between the previous and current stage of the research project is illustrated in Figure 1, where the current stage concerning teachers’ pedagogical tact is displayed on the right. The data collection methods are indicated in the upper part of the figure. The basis of the data collection in both stages was participant observation during craft-art lessons. In the previous stage, the main data consisted of student interviews and were complemented with students’ portfolios and diaries (Ojala et al., 2018). In the current stage, the main data consisted of teachers’ stimulated recall (SR) interviews. SR method, first used by Bloom (1953), involves use of recorded material to facilitate the interviewees to recall their thinking in the original situation (Calderhead, 1981; Clark & Peterson, 1981; Lyle, 2003). In this study, recall was stimulated in two ways: using the video recordings of the learning situations from the current stage’s craft-art lessons and recalling students’ interview data from the previous stage.
The lower part of Figure 1 presents categories revealed in the data analysis both in the previous and current stage and their relation. The teacher SR interviews were coded aligned with the five categories concerning students’ experiences related to emotions (see Table 2). Three categories were formed from the students’ perspective: Students’ management of the process, Students’ own aesthetics, and Students’ presence (Ojala et al., 2018). Management of the process describes how emotions are involved in craft making. Students’ own aesthetics concerns the critical and constant evaluation of a gradually completed concrete aesthetics of an artefact, which triggered many disappointments but also feelings of joy and contentment (Ojala et al., 2018). Students’ presence describes both bodily sensations and mental feelings during craft making (Ojala et al., 2018).

There are two categories in Figure 1 between the previous and current GT research stages: Students’ sense of ownership and Students’ resources. These categories concern students but were discovered through teachers’ reflections in SR interviews. The idea of sense of ownership originated from the theoretical framework of the previous stage (see Spendlove, 2007) and occurred clearly in the teachers’ SR interview data as a phenomenon that structured the actions of both teacher and student. The sense of ownership describes the students’ ability and willingness to engage in and take responsibility for the craft process and the feeling that the ideas and solutions are their own. Moreover, the students’ resources mean, in this context, the students’ personality, skills, attitudes, interests, motivation and coping in life situations that occurred during learning and influenced success in craft-making tasks. The category of students’ resources unfolded only by examining craft-art learning from the teachers’ perspective.

The SR interview data were collected in four BEA schools. The schools were selected using purposive sampling (cf. Krippendorff, 2004, p. 119; Cohen et al., 2007, p. 211), and they are located in southern Finland in small to middle-sized cities. Five female craft-art teachers from these schools were
interviewed during 2016–2018. The participants differed from each other by age and teaching experience. All of them had textile or design education, and three of them had pedagogical studies required in the BEA. The SR interviews lasted one to two hours. The background information of the participants and interviews is presented in Table 1.

**TABLE 1.** Background Information of the participants and SR interviews.

| School | Teacher’s pseudonym | Teacher’s age | Teaching experience in years | Type of recalling | Transcribed words of the SR interviews |
|--------|----------------------|---------------|------------------------------|-------------------|---------------------------------------|
| A      | Emilia               | 32            | 2                            | Video data        | 3 427                                 |
|        | Maria                | 56            | 11                           |                   | 10 809                                |
| B      | Sara                 | 43            | 6                            |                   | 3 450                                 |
| C      | Irene                | 59            | 25                           | Student interview | 4 086                                 |
| D      | Laura                | 48            | 21                           |                   | 4 950                                 |

In three of the teacher SR interviews (Emilia, Maria, and Sara), the recall was stimulated with video data that was recorded while the researcher participated in the craft-art lessons in 2016. The data were recorded in schools A and B during one lesson (135 minutes) in each school. One standing camera filmed an overview in the classroom while the researcher moved with another camera to film encounters between the teacher and students more closely. In school A, the students were designing and making products for Christmas sales they used to organise every year (see Figure 2). The students in school B had a multi-material lamp shade design project (see Figure 3). The video material was edited by selecting sections that included interaction between the teacher and students. Instead of trying to exactly recall thoughts from the original situation (cf. Toom, 2006; Berber, 2019; Vesterinen, 2010), the purpose was to make the teacher reflect on her personal ways of acting and interacting with the students in the learning situations. This way the SR interviews produced richer data with a wider perspective. Two of the teachers, Irene and Laura, had participated in the previous stage of the research project. Issues their students mentioned in the interviews in 2014 were recalled and discussed by reflecting on certain students’ development up to today. The discussion during the SR interviews proceeded freely based on the videos and interview data. All of the SR interviews were recorded and transcribed.
The study followed the common ethical principles to protect participants’ anonymity (see Corbin & Strauss, 2015, pp. 44–45). Research consent was requested from the students and their parents for participant observation and video recordings. In this article, the citations are identified with the teacher’s pseudonyms.
The analysis followed the GT strategies, such as questioning, making comparisons and looking at language and emotions expressed (Corbin & Strauss, 2015, p. 90). The interviews were listened to and coded as a parallel process. In open coding, an important tool was writing memos, naming and comparing segments of the data with tables (see Corbin & Strauss, 2015, p. 106). The open coding continued by organising the data according to the previous categories concerning the students’ emotions. In axial coding, the new categories were developed with constant comparison and by drawing figures (Strauss & Corbin, 1990, p. 96–97). When the new categories were clear enough, the conceptual framework was integrated with the findings towards the end of the analysis, which is a usual procedure in GT studies (Corbin and Strauss, 2015: p. 49, 51; Charmaz, 2006: p. 165; Hodkinson, 2008). Every step of the analysis was returned back to the data to ensure that the interpretations were in line with the data. The videos raised real-life situations to be discussed during the interviews; non-verbal interaction and other nuances of the learning situations could be interpreted and analysed. The teachers who had participated in the previous stage of the study were able to discuss the students’ development over a longer period, and the analysis could be complemented with a longitudinal perspective.

STUDY FINDINGS
In this section, we present in more detail the categories found in the analysis of the teacher interviews. The teachers’ pathic perceiving, acting and interacting in the learning situations during craft-art studies are examined utilising the earlier found categories related to students’ emotional experiences in learning craft-art: management of the process, own aesthetics, presence, resources and sense of ownership (Ojala et al., 2018). Table 2 summarises the results.

| Teachers’ pathic perceiving includes: | Students’ management of the process | Students’ own aesthetics | Students’ presence | Students’ resources | Students’ sense of ownership |
|-------------------------------------|-------------------------------------|--------------------------|-------------------|---------------------|----------------------------|
|                                     | the students’ emotional state during the process, critical moments of the process and the students’ need for support | the students’ contentment, enthusiasm, frustration, disappointment, etc. towards the outcome | the students’ emotional state, feelings that interfere with working tensions between the teacher and student physical distance to the student | the students’ life situation and general interest towards craft studies preparedness to face challenges the students’ personality regulation of emotions development of skills and personality | how the students receive the task and feel it as their own the students’ engagement, initiative and responsibility |
**Teacher’s pathic acting includes:**

- sensitive encountering
- understanding the students’ feelings
- offering help in critical phases to avoid failure and to succeed
- helping to proceed in the process
- encouraging to take risks
- helping to achieve desired outcome
- balancing how much to bring out their own views
- guiding to develop the students’ aesthetic sense
- adapting requirements to the students’ emotional state
- not demanding the same effort from everyone
- trying to ease the interfering feelings
- helping to achieve desired outcome
- adapting requirements to the students’ resources
- knowing the students
- acknowledging the growth of the students
- enabling support from the group
- varying activity according to the students’ sense of ownership
- aiming to transfer ownership gradually to the students
- assuming the students’ inner desire to work

**Teacher’s pathic interacting is:**

- calming, balancing and clarifying
- encouraging, ensuring and negotiating
- challenging, provoking
- verbalising the students’ feelings
- listening, considering the ideas of the students
- discussing views of a different kind
- negotiating, the teachers’ knowledge versus the students’ ideas
- non-verbal, looking, touching, being present
- discussing in private
- demanding special sensitivity and presence
- sharing the students’ personal burden: listening, discussing, being present
- adapting the interaction to each student; creating emotional connection
- verbalising the students’ experiences
- evoking the students’ sense of ownership
- discussing, how the ownership is shared

**Teacher’s pathic perceiving**

Our analysis revealed that the teachers were empathically perceiving the students’ emotions and reactions in the different phases of the craft-making process. Attention was focused on students’ need for help and evaluating what kind of support students were able to adopt at any moment. The teachers tried to sense the students’ emotions and adapt their actions accordingly. They paid attention to such emotions as enthusiasm, contentment, discontentment, joy, uncertainty, tension, disappointment, frustration and sense of inadequacy.

The teachers perceived what kind of ideas the students were enthusiastic about. They perceived the students’ contentment towards the outcome at different stages of the process. The students had a visual image of the intended result, which was based on what they considered aesthetic and what kind of quality of work they were satisfied with. Maria describes a situation where the teacher’s and student’s evaluations of a finished artefact differ.

> It’s a kind of trickier (situation) when the work is good. It turned out well... but the student experiences discontentment and feelings of inadequacy, that this is not good enough, and perhaps she wasn’t capable to carry out her own idea. She would like to make something really nice and visualises in her mind what it is like. And then it doesn’t turn out like that.

In the learning situations, the teachers often perceived the student’s emotional state, alertness or vitality. Stress, tiredness, worries and such issues seemed to influence the student’s readiness to work and adopt teaching. Maria describes the following:
You may realise in that situation that now it’s not the time for this. Let’s get back to this matter maybe next week or later today. Right now the student can’t take in anything.

The tensions caused by the relationship between a student and teacher were perceived by the teachers. For example, Sara said that she had noticed that one student was a little afraid of her. Maria perceived her own physical distance to the student from the video and thought about the student’s experience of the situation in which they discussed in private: ‘I probably thought about Elise’s personal space, that she has to have the space of her own, so she won’t start feeling anxious’.

The teachers observed the students in situations related to skills and personality development and general interest towards craft studies. In the long run, the teachers perceived the students’ emotional regulation development as the ability to face and set challenges for themselves. Laura gave an example of a student who repeatedly gave up in the middle of her craft-making process because she set too high standards for her work compared with her skills, but over the years she learned how to tolerate the disappointment.

She could already tell the moment when it ends up in the trash. So, they get much better at it by themselves... In the last years, she didn’t abandon any work and... she did really fantastic work.

Students’ sense of ownership—how they engaged, showed initiative and took responsibility for their own work—was also recognised by the teachers. The teachers anticipated how the students would receive a new craft assignment, which was seen as an important precondition for the success of a craft project. The more a student seemed to have a sense of ownership, the more the teacher’s role as a source of information decreased, as Sara tells in the next example.

She is able to conclude many things, how to do them, and she manages well. She is very good. Whereas there are those who say: “Hey teacher, what should I do?” And if I don’t go to them right away, then they do nothing. This student is working all the time and is the one who cobbles things together. If I don’t get to her right away, she makes her own decisions...

To summarise, teachers’ pathetic perceiving included sensing students’ emotions, especially in critical moments of the craft process, feelings about the outcome or other feelings that seem to interfere with students’ working. The teachers also perceived students’ personality, skills, engagement, ability to regulate emotions and how these matters developed.

**Teacher’s pathetic acting**

The teachers’ pathetic acting often occurred as guiding and balancing the students’ emotional energy in the learning situations. The teachers’ sensitive and tactful encounters with the students were essential as they tried to understand the students’ feelings. Maria gives her interpretation of an encounter with a student when recalling the situation presented in the video.

Elise started to cry... I thought that it was the pressure, the performance stress that became too hard on her... I probably apologised to her, if I had put too much pressure on her or expected too much.

The teachers encouraged the students to understand their feelings while going through the creative processes. For example, Emily advised that going beyond one’s comfort zone gives you the greatest joy. The teachers guided the students to go over the critical moments of the process, to avoid failure and to succeed. Sara used humour to ease the students’ stress, which was a signal to not take things too seriously. Irene encouraged her students to take risks and not to fear failures that cannot be avoided in craft but always said to the students: ‘It’s going to go well!’

To assist the students in creating outcomes that would please them, the teachers aimed to understand their aesthetic ideas. The teachers considered the students’ interests when planning tasks and followed the students’ contentment during the whole craft-making process. Irene described the presence of aesthetic evaluation in the process:
It’s funny how it is implicitly in there, that the product is the kind they desire, but it is not discussed; we are making it, we are looking at it, we are working so hard to make it how we want it to be—even the teacher.

The teachers thought that the students’ emotions could not be ignored and the teachers’ own demands must always adapt to the situation. In the next example, Laura describes her order of priorities and the importance of atmosphere in the learning situation.

Here comes the order of precedence. First, we create the atmosphere and then we start to study. In other words, I can never ignore the student and her emotional state...I can do nothing but create the atmosphere so that she feels that she can let go of the emotion. And then, it’s no longer my matter whether it takes five minutes or the whole lesson.

The teachers helped the students challenge themselves and supported their sense of competence by optimally challenging tasks. All teachers said that they sought balance between demanding and holding back depending on the situation and the student’s personality. They adapted their acting to the students’ reactions and their observations of non-verbal communication that indicated the students’ emotional state. The teachers felt they treated the students equally, though they did not expect the same of everyone. Sometimes the situation had to be first worked through in some way before the student was able to continue working. The means to deal with the block were listening, discussing, being present, and directing the student to do something else. For example, Laura mentioned easy extra tasks, and Maria considered free painting as a well-tried method to relax the body and mind.

The teachers were often aware of the students’ different life situations, and they adapted their requirements to these in the learning situations. They shared the view that the students must grow at their own pace. Laura said that she has confidence in every student’s ability to develop. The teachers regarded being allowed to share the different phases of the students’ growth as rewarding. Maria said: ‘It’s wonderful to follow and hear all their episodes of life...’

The teachers adapted their acting according to the students’ sense of ownership in craft-art making. The less a student showed a sense of ownership in their making, the more the teacher had to support them. When the student was skilled and motivated enough, the ownership was gradually transferred to the student, and the teacher was active only when needed. Irene described how she kept the tasks as open as possible and allowed the students to approach them from several directions.

To summarise, teachers’ pathic acting included sensitive and understanding encounters with the students. The teachers helped students to succeed in their work and proceed through critical moments of the process. They always adapted their requirement according to students’ emotional state and personal resources while trying to transfer ownership of the process gradually to the students.

Teacher’s pathic interacting
Pathic interacting emerged in the data as the teachers’ intuitive, reflective, approving, informative and negotiating way to communicate. Depending on the situation, the teacher interacted calmly, guiding and encouraging the students’ craft-art process. In a critical moment, the teacher facilitated the students to succeed and move on. The teacher could also verbalise the students’ emotions related to the creative process. During technical problems, the interaction resampled a negotiation where both the teacher’s and the students’ points of view were equal, and the solution was sought together.

The teachers wanted to teach the students to trust their abilities and to tolerate and accept failure as a part of craft making. Sometimes the teachers challenged the students to take risks. Irene said: ‘I never force... I more like challenge by tempting’. The teacher’s job was to put a little pressure and then ensure success. ‘I am good at pushing people to the edge of a cliff. Jump! Nothing bad can happen, I’ll hold on to you’, described Irene.

Interacting that concerns a student’s aesthetics occurred as listening, conversation and negotiation. The video showed how Sara silently observed the student’s work in an evaluative way. First there was a long silence; then she commented or suggested how to proceed. The situation was often
followed by negotiation, combining the teacher’s knowledge and the student’s idea for the desired outcome. The negotiation might first look like a very neutral transmission of information, but it came clearly visible in the video that it included emotional communication full of nuances when the teacher sensitively helped the student to compromise.

The teachers aimed to interpret the students’ non-verbal expressions of emotions and adapt their interaction accordingly. They felt that this demanded sensitivity, presence and intuition, such as when the teacher touched or hugged a student. Maria explains how she uses intuition in interacting with the students who seem to need emotional support.

...I sense if they worry about something. And I have such a habit that I might say quite directly: “Is something wrong? Is there something that bothers you?”...when passing by, I might pat the student’s shoulder...to show her that you can just be or it is okay.

Interacting that acknowledges students’ emotions includes bodily interaction: watching, touching and being present. ‘With my look, I can disapprove or I can accept’, expressed Laura. The teachers took the students seriously and respected their views as equals. Maria describes this in the following example.

Because you don’t want to break anything, you want to support, so you have to kind of always weigh what to say...what kind of message you send about how an adult encounters... or how the adult behaves in a situation. And a message about whether you take seriously the young person’s matters or her hopes, or her views, and what she wants to do, whether you respect it.

The teachers created the atmosphere in the classroom in the way that they communicated and were present for the students. The more familiar the students were, the more direct the interaction was, though the teacher’s style of interacting varied according to the student’s personality, which shows in Maria’s citation.

I have, for example, one (student), Emma, to whom I quite directly say that now you do this and this. Then there is Mona to whom I really can’t say that. She is so fragile; she is like made of glass.

Interaction was also a way to evoke the student’s sense of ownership. Emilia expressed: ‘If you manage to tell them some idea or to say the right words, their lamp lights up’. Evoking the sense of ownership was also described as inspiring, suggesting or even pushing. The common challenge was to find the student’s own idea. In addition, there was a shared sense of ownership: thinking and seeking a solution together. ‘I ask, “what do you think?” I suggest, but, after all, I leave the solution to the student’, explained Irene. Some of the advanced students took ownership themselves, and the teacher was only present and consulted when needed.

To summarise, teachers’ pathic interacting was verbal and non-verbal: calming, balancing and encouraging talk; looking; sometimes touching; or just being present. Interactions were also negotiating, challenging or sharing both teachers’ and students’ views. The teachers adapted their interaction to the situation, aimed at creating emotional connection to each student and opening the atmosphere in the group.

DISCUSSION: TEACHERS’ PEDAGOGICAL TACT IN CRAFT-ART

In this section, the results of the teacher interviews are approached through the theoretical concepts that supported the data analysis. Figure 4 illustrates the theoretical key concepts of the study supplemented with adjectives to describe the teachers’ pathic perceiving, acting and interacting in the context of craft-art.
In this article, the teachers’ perceiving, acting and interacting can be described as pathic because they are able to create contact with the lived experience of their students (van Manen & Li, 2002). The qualities of pathic knowing are present in craft learning situations (c.f. Syrjäläinen & Haverinen, 2012). Watching the recorded videos of art-craft lessons with the teachers shed light on how pedagogical tact occurred while interacting with speech, tone, silence, eye contact, gestures and presence (van Manen, 1991b, pp. 173–182). Sometimes the situation needed the teacher’s silent attention (van Manen, 1991, p. 177). Further, the teachers’ and the students’ body language were an essential unspoken part of the interaction in these encounters. Van Manen (2008) notes that a tactful teacher can interpret students’ feelings from indirect clues, for instance to sense the adequate distance to keep to the students in each situation or instantly know the appropriate thing to say based on each student’s individual nature. Sipman et al. (2019) suggest that it would be beneficial to be more aware of intuition and the role it plays in reacting with pedagogical tact in complex learning situations. In addition, acknowledging students’ feelings is an essential feature of autonomy-supportive teaching styles (e.g., Niemic & Ryan, 2009). The teachers helped the students to understand themselves by being open to their experiences and verbalising their emotions (cf. van Manen, 2008; 2015, p. 79).

Allowing as much freedom as possible, the teachers wanted to support the students gradually to lead the students to think and act more independently. In this way, they cultivated the students’ autonomy and competence (e.g., Deci & Ryan, 2020). Further, autonomy-supportive teaching styles, which include giving students a provision of choice and supporting their initiative, have been found to enhance students’ intrinsic motivation, engagement and achievement (Jang et al., 2012; Patall et al., 2013; Reeve et al., 1999; Reeve & Jang, 2006; Ryan & Deci, 2020). In the context of craft-art, the students’ the independency and responsibility in making was defined as a sense of ownership (see Ojala...
et al., 2018; Spendlove, 2007). In the long run, the teachers perceived how the sense of ownership increased: students’ originality in ideas, initiative and responsibility in the whole craft process developed. Along the students’ growth, the teacher’s role changed. They could withdraw to the background and give space to the student to act freely.

Data revealed how the teachers aimed to create a sense of relatedness in their groups by their tactful action and interaction. Apparently, the teachers had a personal and caring relationship with the students, and they wanted every student to feel accepted regardless of achievement. According to Ryan and Deci (2017, p. 166), secure atmosphere is connected to the students’ sense of relatedness. An open and safe atmosphere was created by listening, discussing and being interested in the students’ thoughts and ideas. Being responsive to students’ interests is also considered an important way to support students’ autonomy in learning situations (Reeve et al., 1999, Ryan & Deci, 2020, Ryan & Deci, 2017, p. 386).

The teachers discussed that building mutual confidence was a necessary precondition for learning in their class. The caring relationship was created in a continuum of good contact moments, where the student felt seen and heard as a unique person (Korthagen et al., 2014; Noddings, 2005, pp. 16, 68–69; van Manen, 2015, pp. 107–116, 142–147). All the participants preferred to teach the same group for as many years as possible. They also experienced succeeding more as teachers when they knew their students well. It was mentioned in the data that being part of the students’ growth made the teacher’s work feel meaningful and more satisfying. Noddings (2005, pp. 63–73) regarded continuity as one of the essential aspects of caring pedagogy in school.

Attempting to enhance their students’ sense of competence, the teachers constantly supported their success in craft tasks. The teachers’ perception was focused particularly on the students’ need for help and anticipating frustration or a sense of failure. Competence refers to the feeling of mastery, efficiency and success, which the teacher can support by offering structure and positive feedback and by providing ‘scaffolds’ to ease challenges that are too high (Ryan & Deci, 2017, p. 11; Deci & Ryan, 2020). The teachers also strengthened the students’ competence by considering them equals, listening to their ideas and respecting their views (see Korthagen et al., 2014; van Manen, 1991b; 2015), which is considered in SDT as the teacher’s way of fulfilling the students’ need for relatedness (Niemic & Ryan, 2009).

To summarise, the teachers’ pedagogical tact manifested itself in the teachers’ pathic perceiving, acting and interacting. Pathic perceiving refers to the teachers’ way of being authentically present and seeing the students’ whole existence regarding their emotions, expectations and experiences (van Manen, 2015, pp. 62-63, 92, 139). In addition, pathic perceiving seemed to include features of autonomy-supportive teaching styles (Reeve & Jang, 2006, Niemic & Ryan, 2009). The teachers’ pathic acting manifested in the learning situations: understanding orientation in their being and acting with the students, openness to young persons’ experiences and sensitivity to the particularities of each situation and each student (van Manen, 2015, p. 79). Pathic acting also enhanced the students’ basic psychological needs: autonomy, competence and relatedness. Pathic interacting was based on the contact that refers to close human relations and connectedness (van Manen 2015, p. 107) and aims to the students’ sense of relatedness (Niemic & Ryan, 2009). Pedagogical tact was mediated through interacting with speech, tone, silence, eye contact, gestures and presence (van Manen 1991b, pp. 173–182). Consequently, with all these together, the teacher created an open and safe atmosphere (van Manen, 1991b, p. 184). All these, including the students’ experiences related to emotions, were meant to enable each student’s personal growth in making craft-art.

CONCLUSIONS
Pedagogical tact occurs in every educational context where children and adults, students and teachers, and novices and experts encounter and share pedagogical moments (van Manen 1991b, 2015). This article presents the unique way in which this tact manifests itself in the context of craft teaching in the BEA. Admitting the limitations of this study, it is clear that more research is needed about the phenomenon in the BEA context and other contexts of craft learning. The study shows the delicacy of the
learning situation in crafts where the teachers perceived each student as a growing and developing young person who brought along one’s own experiences, thoughts and emotions into the learning situation. Every nuance of the teachers’ action and interaction seemed to have a meaning and an opportunity to support students’ development. The study shows the importance of teachers’ sensitivity, an authentic encounter with a student and the need for self-reflection in teaching crafts where students work using their whole personality.

The present study locates in the end of the GT process. Consequently, we found it challenging to report the new findings apart from the previous results because the analytical circles are cumulative in nature (see Corbin & Strauss, 2015, p. 20). In every phase, the new data were collected and coded initially using inductive thinking and following the GT’s principle of theoretical sampling (Corbin & Strauss, 2015, pp. 134–135). The previous analysis and its categories were utilised to integrate the findings from both students’ and teachers’ perspectives, which were both needed to understand the phenomenon occurring in craft-art learning. The concern of the present stage of the study was a difficulty to define original names for categories to cover all incidents in the data. Instead of staying in the descriptive level, the problem was solved using van Manen’s term pathic and the concept of pedagogical tact. Towards the end of the analysis, the researchers’ reasoning turned more abductive, which is considered an essential part of a new generation’s GT (Bryant, 2009; Thornberg, 2012). The methodological choices corresponded with Thornberg’s (2012) idea of so-called informed GT that refers to taking advantage of using pre-existing theories and research findings in a creative and flexible way (see also Charmaz & Thornberg, 2021).

The theoretical contribution of this GT study is to apply the concepts pedagogical tact and pathic to define the BEA teachers’ perceiving, acting and interacting on an abstract level. In addition, the SDT’s terms autonomy, relatedness and competence and Noddings’ notion of caring relationship are used to conceptually explain the unique quality of learning situations in craft-art and the relationship between the teachers and students. As a conclusion, the findings of this study show that the pedagogy of craft-art offers optimal learning situations to enhance students’ holistic development and growth in the BEA context. The study provides conceptual tools for the teacher to understand the pedagogical potential of craft-art and to reflect on their own activities as teachers. Five categories (management of the process, own aesthetics, presence, resources and sense of ownership) from the students’ perspective help the teacher to pay attention to each student’s point of view concerning their experiences of craft processes. Becoming aware of and understanding these ideas benefits the teacher in practice to structure and see the learning situation in a new way from the students’ position. This study leaves open how pedagogical tact and pathic knowing in craft teaching could be developed, providing a potential topic for future research. In addition, the group dynamics in learning crafts are essential and would require deeper investigation. Further, the study raises a question about what competencies can actually be acquired through craft making and learning.

ACKNOWLEDGEMENTS
We thank The Finnish Cultural Foundations for funding this stage of the research project and our sincerest thanks to the students and the teachers in BEA who participated in the study.
REFERENCES

Bloom, B. S. (1953). Thought-processes in lectures and discussions. *Journal of General Education, 7*(3), 160–169. http://www.jstor.org/stable/27795429

Bryant, A. (2009). Grounded theory and pragmatism: The curious case of Anselm Strauss. *Qualitative Social Research, 10*(3), Art. 2, 1–39. http://www.qualitative-research.net/index.php/fqs/article/viewArticle/1358/2850

Calderhead, J. (1981). Stimulated recall: A method for research on teaching. *British Journal of Educational Psychology, 51*(2), 211–217. https://doi.org/10.1111/j.2044-8279.1981.tb02474.x

Charmaz, C. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage.

Charmaz, C., & Thornberg, R. (2021). The pursuit of quality in grounded theory. *Qualitative Research in Psychology, 18*(3), 305–327. https://doi.org/10.1080/14780887.2020.1780357

Clark, C. M., & Peterson, P. L. (1981). Stimulated recall. In B. R. Joyce, C. C. Brown, & L. Peck, (Eds.) *Flexibility in teaching: An excursion into the nature of teaching and training* (pp.256–261). Longman.

Dewey, J. (1933). How We Think. https://doi.org/10.4324/9780203029053

Corbin, J., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). Sage.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour*. Plenum Press. https://doi.org/10.1007/978-1-4899-2271-7

Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01

Finnish National Agency for Education. (2017). *The National Core Curriculum for Basic Education in the Arts*, Finnish National Agency for Education. https://www.oph.fi/fi/koulutus-ja-tutkinnot/kasityo-taiteen-perusopetukessa-2017

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine de Gruyter. https://doi.org/10.1097/00006199-196807000-00014

Groth, C. (2016). Design- and Craft thinking analysed as Embodied Cognition. *FormAkademisk, 9*(1). https://doi.org/10.7577/formakademisk.1481

Groth, C. (2017). *Making sense through hands: Design and craft practice analysed as craft practice analysed as embodied cognition* [Doctoral dissertation, Aalto University, School of Arts]. http://urn.fi/URN:ISBN:978-952-60-7130-5

Hilmola, A. J., & Lindfors, E. (2017). Pupils’ performance in managing the holistic craft process. *Technē Series - Research in Sloyd Education and Craft Science A, 24*(1), 29–41. https://journals.oslomet.no/index.php/technaA/article/view/1808

Hodkinson, P. (2008). Grounded theory and inductive research. In N. Gilbert (ed.), *Researching Social Life*, (3rd ed.) (pp. 80–100). Sage.

Huotilainen, M., Rankanen, M., Groth, C., Seitamaa-Hakkarainen, P., & Mäkelä, M. (2018). Why our brains love arts and crafts: Implications of creative practices on psychophysical well-being. *FormAkademisk, 11*(2), 1–17. https://doi.org/10.7577/formakademisk.1908

Häätänen, U., Lepistö, J., & Rönkkö, M.-L. (2018). Students confronting risks during holistic craft processes. *Technē Series - Research in Sloyd Education and Craft Science A, 25*(1), 31–48. https://journals.oslomet.no/index.php/technaA/article/view/1872

Illum, B., & Johansson, M. (2012). Transforming physical materials into artefacts-learning in the school’s practice of sloyd. *Technē Series - Research in Sloyd Education and Craft Science A, 19*(1), 2–16. https://journals.oslomet.no/index.php/technaA/article/view/393
Jang, H., Kim, E., & Reeve, J. (2012). Longitudinal test of self-determination theory’s motivation mediation model in a naturally occurring classroom context. *Journal of Educational Psychology, 104*(4), 1175–1188. https://doi.org/10.1037/a0028089

Johansson, M. (2006). The work in the classroom for sloyd. *Journal of Research in Teacher Education, 13*(2-3), 152–171. https://etselts.ee/wp-content/uploads/2016/09/lofu_nr2_3_2006.pdf#page=152

Karppinen, S. (2005). “Mitä taide tekee käsityöstä?” Käsityötaiteen perusopetuksen käsitteellinen analyyysi [“What does art make from crafts?” Conceptual Analysis of Basic Crafts Education] [Doctoral dissertation, University of Helsinki], Faculty of Education, Studies 263.

Karppinen, S. (2008). Craft-art as basis for human activity. *International Journal of Art & Design Education, 27*(1), 83–90. https://doi.org/10.1476-8070.2008.00560.x

Korthagen, F. A. J., Attema-Noordewier, S., & Zwart, R. C. (2014). Teacher–student contact: Exploring a basic but complicated concept. *Teaching and Teacher education, 40*, 22–32. https://doi.org/10.1016/j.tate.2014.01.006

Koskinen, A., Seitamaa-Hakkarainen, P., & Hakkarainen, K. (2015). Interaction and embodiment in craft teaching. *Techne Series - Research in Sloyd Education and Craft Science A, 22*(1), 59–72. https://journals.oslomet.no/index.php/techeA/article/view/1253

Krippendorff, K. (2004). *Content analysis. An introduction to its methodology*. Sage.

Kvellestad, R. V., Stana, I., & Vatn, G. (2021). Working Together: Cooperation or Collaboration?. *FormAkademisk, 14*(4), 1–17. https://doi.org/10.7577/formakademisk.4648

Lyle, J. (2003). Stimulated recall: A report on its use in naturalistic research. *British Educational Research Journal, 29*, 861–878. https://doi.org/10.1080/0141192032000137349

Niemic, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education, 7*(2), 133–144. https://doi.org/10.1177/1477878509104318

Noddings, N. (2005). *The challenge to care in schools. An alternative approach to education*. (2nd ed.). Teachers College Press.

Noddings, N. (2012). The caring relation in teaching. *Oxford Review of Education, 36*(6), 771–781. https://doi.org/10.1080/03054985.2012.745047

Ojala, M. (2013). Constructing knowledge through perceptual processes in making craft-art, *Techne Series - Research in Sloyd Education and Craft Science A, 20*(3), 62–75. https://journals.oslomet.no/index.php/techeA/article/view/756

Ojala, M., Karppinen, S. & Syrjäläinen, E. (2018). Towards making sense of self through emotional experiences in craft-art, *Craft Research, 9*(2), 201–227. https://doi.org/10.1386/crre.9.2.201_1

Patali, E. A., Dent, A. L., Oyer, M., & Wynn, S. R. (2013). Student autonomy and course value: The unique and cumulative roles of various teacher practices. *Motivation and Emotion, 37*, 14–32. https://doi.org/10.1007/s11031-012-9305-6

Pöllänen, S. (2009). Contextualizing craft: Pedagogical models for craft education. *The international journal of art & design education, 28*(3), 249–260. https://doi.org/10.1080/030131012-9305-6

Reeve, J., Bolt, E., & Cai, Y. (1999). Autonomy-supportive teachers: How they teach and motivate students. *Journal of Educational Psychology, 91*(3), 537–548. https://doi.org/10.1037/0022-0663.98.1.209

Reeve, J., & Jang, H. (2006). What teachers say and do to support students’ autonomy during a learning activity. *Journal of Educational Psychology, 98*(1), 209–218. http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=ovf&NEWS=N&AN=00004760-199909000-00010

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press. https://doi.org/10.1521/978.14625/28806
Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology, 61.*
https://doi.org/10.1016/j.cedpsych.2020.101860

Rönkkö, M.-L., & Lepistö, J. (2016). The craft process developing student decision making. *Techne Series - Research in Sloyd Education and Craft Science A, 23*(1), 48–61.
https://journals.oslomet.no/index.php/techneA/article/view/1457

Seitamaa-Hakkarainen, P., Huotilainen, M., Mäkelä, M., Groth, C., & Hakkarainen, K. (2016). How can neuroscience help understand design and craft activity? The promise of cognitive neuroscience in design studies. *FormAkademisk, 9*(1). https://doi.org/10.7577/formakademisk.1478

Shusterman, R. (2013). Body and the arts: The need for somaesthetics. *Diogenes, 59*(1–2), 7–20.
https://doi.org/10.1177/0392192112469159

Sipman, G., Thölke, J., Martens R., & McKenney, S. (2019). The role of intuition in pedagogical tact: Educator views. *British Educational Research Journal, 45*(6), 1186–1202. https://doi.org/10.1002/berj.3557

Spendlove, D. (2007). A conceptualisation of emotion within art and design education. *International Journal of Art & Design Education, 26*(2), 155–166. https://doi.org/10.1111/j.1476-8070.2007.00525.x

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research. Grounded theory procedures and techniques.* Sage.

van Manen, M. (1999) The pathic nature of inquiry and nursing. In I. Madjar, & J. Walton, (Eds). *Nursing and the Experience of Illness: Phenomenology in Practice* (pp. 17–35). Routledge.

van Manen, M. (2008). Pedagogical sensitivity and teachers practical knowing-in-action. *Peking University Education Review, 1*(23).
http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1040.7565&rep=rep1&type=pdf

van Manen, M. (2015). *Pedagogical tact: Knowing what to do when you don’t know what to do.* Routledge.
https://doi.org/10.4324/9781315422855

van Manen, M., & Li, S. (2002). The pathic principle of pedagogical language. *Teaching and Teacher Education, 18*(2), 215–224. https://doi.org/10.1016/S0742-051X(01)00065-8