

**LANGUAGE STUDENTS' PERCEPTIONS OF EMOTIONAL
DIFFERENCES IN CONTACT AND DISTANCE LEARN-
ING**

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<p>Tiivistelmä – Abstract</p> <p>Kun opetus alkoi palaamaan Covid-19 pandemian jälkeen etäopetuksesta lähiopetukseen syyslukukaudella 2021 ja kevätlukukaudella 2022, tarjoutui mahdollisuus vertailla opiskelijoiden emotionaalista kokemusta eri opetusmuodoissa. Koska opiskelijoilla oli viimeaikaisia kokemuksia sekä lähi- että etäopetuksesta, pystyttiin samojen opiskelijoiden kokemuksia molemmista opetusmuodoista käyttämään vertailukohtana. Emootioita on tutkittu hyvin vähän etäopetuskontekstissa, vaikka niiden vaikutukset oppimiseen ja opiskelun mielekkyyteen voivat olla merkittäviä. Koska etäopetus eri muodoissaan on hyvin käytännöllistä, on sen hyödyntäminen tulevaisuuden opetusmetodina hyvin todennäköistä. Siksi onkin tärkeää selvittää sen erilaisia vaikutuksia oppimiseen.</p> <p>Tutkielman tavoitteena oli selvittää, millä tavoin opiskelijat ovat kokeneet emotionaaliset erot lähi- ja etäopetuksessa, sekä mitkä tekijät eroihin ovat vaikuttaneet. Lisäksi selvitettiin, millä tavoin opiskelijoiden emootiot eroavat esitelmiä pitäessä eri opetusmuodoissa. Esitelmät valittiin vertailuun, sillä tämä antoi mahdollisuuden verrata emootioita tilanteessa, joka sisältää toistuvuutta läpi kurssien. Tutkimus toteutettiin kyselylomakkeella, joka sisälsi sekä Likert-väittämiä, että avoimia kysymyksiä. Numeerinen data jokaisesta Likert-väittäjästä analysoitiin yksitellen ja opiskelijoiden asenteista pyrittiin löytämään teemoja. Nämä teemat yhdistettiin avoimien kysymysten vastausten kanssa, jotka analysoitiin temaattisella analyysillä. Tämä mahdollisti numeerisen datan taustalla olevien tekijöiden tunnistamisen.</p> <p>Tutkimuksesta saadut tulokset osoittivat, että lähiopetuksessa oppimiskokemus on keskimäärin positiivisempi kuin etäopetuksessa. Oppimiskokemus ei siitä huolimatta ole etäopetuksessa kaikkien opiskelijoiden mielestä myöskään negatiivisempi, vaan emootiot saattavat olla kokonaisuudessaan laimeampia. Siinä missä lähiopetuksessa korostuivat ilo ja parempi keskittyminen, etäopetuksessa korostuivat rentous ja tylsyys. Positiivista etäopetuksessa oli yleisesti vähempi hermostuneisuus ja ahdistuneisuus. Sama tulos koski myös esitelmien pitämistä. Lisäksi etäopetuksessa oli selviä käytännön etuja, kuten vähentyneet matkat ja aikatauluttamisen vaikeudet.</p> <p>Tutkimus osoitti myös, että muiden fyysinen läsnäolo sekä fyysinen luentosali ovat taustatekijöitä, jotka vaikuttavat emootioiden eroihin eri opetusmuodoissa. Sosiaaliset kontaktit, muiden läsnäolo, sekä yhteisöllisyys vaikuttavat positiivisesti opiskelijoiden oppimiskokemukseen. Toisaalta muiden läsnäolo voimistaa myös negatiivisia tunteita, kuten ahdistuneisuutta, niiden ilmaantuessa.</p>	
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1 INTRODUCTION

Among all the vast changes in society and the urgent need for social distancing, the Covid-19 pandemic also moved most pedagogical practices online. The change of setting has undoubtedly influenced the practices themselves but perhaps more importantly, the people who are involved in them. The contact and distance learning settings are very different from many different standpoints, and each of these differences is likely to affect the students and teachers in some manner, although some of these aspects may not be quantifiable. One important aspect in pedagogy and overall human experience are the emotions we feel, and how they adapt and modulate our experience. Different settings are very likely to produce different levels of emotions and different emotional experiences altogether in human beings. Since emotions are very central to the human experience, the produced emotions alter and affect our learning too. Therefore, it is important to understand how and why a pedagogical setting affects students' emotions. Thus, the aim of this thesis is to study the emotional differences between contact and distance learning.

Especially in recent years and in the higher education context, distance learning has become a widely accepted and important approach that can overcome the limitations of on-campus contact learning (Stephan, Markus and Gläser-Zikuda 2019). Generally, the term *distance learning* encompasses a broader range of different types of studying and teaching when compared to contact learning. Distance learning can be, for example, instructional delivery where the learner and teacher are at different locations physically, as well as in disparate times, i.e., not communicating directly with each other (Moore et. al. 2011: 129). This broader idea of distance learning can include many benefits over contact learning, such as freedom to choose the time for studies, curriculum flexibility, monetary savings, and lack of commuting (Sadeghi 2019: 83). However, these benefits can be specific to the seat of learning, culture, and field of study. The present study aims to focus on active participation forms of contact and distance learning, i.e., classroom settings where some forms of active participation is

required, essentially comparing virtual and physical settings, where the goals and the pedagogical means to reach them are corresponding, apart from the apparent technological differentiating factors. Therefore, some of the aforementioned benefits may affect the students' perceived emotions, but not the extent of complete temporal and curriculum flexibility that can be possible in some online contexts. The context of the present study provides an excellent opportunity to compare the emotional differences in the classroom settings specifically, as some of the other factors that the term distance learning encompasses can be separated. The participants studied are University of Jyväskylä language students, who have recent experiences of both distance and contact learning classroom settings.

First after this introduction, background theory on emotions is provided and their effects on learning are considered. Secondly, the present study and its aims, research questions, and methods are introduced. Thirdly, the findings of this study are detailed. Finally, the findings are discussed and concluded, and limitations of the study are considered.

2 EMOTIONS

Emotions are an affective notion that lack consensus in their definition. Emotions can arise through different systems, for different reasons, and cause different responses in humans. These responses include changes in subjective experience, physiology, and behavior (Levenson 1994: 123). The aim of this chapter is to give an overview of the notion, introduce related phenomena, and provide thoughts and models for analyzing emotions.

2.1 The notion of emotions

Emotions are a multi-faceted notion that lack consensus in their definition. Generally, emotions could be described as brief mental states that are used to adapt to the ever-changing needs caused by the changing environment we live in (Levenson 1994: 123). Emotions can be described and classified in numerous ways. Often emotions can be referred to as lists, such as: “anger, joy, disgust, happiness, and fear” (Cabanac 2002: 69). These lists work as reference to our experience and allow us to understand what is being addressed, but do not give any explanation about the nature of the notion itself. Other more specific classifications and theories try to explain what is central to emotions as a reaction, how and why emotions arise, how they affect human physiology, action, and thinking, and how this applies to other phenomena, such as learning (Schrer 2000).

The broadness of the notion makes defining it a difficult task, along with other somewhat similar and overlapping affective concepts, such as *affect*, *attitude*, and *mood*. *Affect* is an umbrella term, which broadly refers to all valenced states in the human condition, i.e., feeling good, bad, or somewhere in between. *Moods* refer to lower-intensity emotional states, which last longer than emotions do, do not have a particular object, and change less rapidly based on outside stimuli. *Attitudes* refer to the beliefs

about something being good or bad. Like moods, attitudes have longer durations than emotions, but differently to moods, attitudes have an object, although the beliefs about the object do not necessarily need to be based on any actual previous experiences (Gross 2010: 212, Shuman and Scherer 2014: 18).

However, different researchers in the field use the terms differently, which may inhibit research and its clarity (Gross 2014: 6). While all the overlapping and similar terms are useful when considering the human affect, there are multiple reasons why emotions are chosen for this study. Firstly, emotions are shorter lived and more easily identified as distinctive experiences than overall affect, attitude, or mood. Secondly, emotions have been vastly researched in the second language context, more so than other affective phenomena, and their effects on learning have been identified. Lastly, from the affective vocabulary, emotions are best associated with the commonly used term 'feel' or 'feelings' (Gross 2014: 4). This relatedness is important, as the study is essentially about everyday experience in which people "feel" and may be weary of terms such as affect, mood, or emotion.

2.2 Circumplex model of affect

Different theoretical perspectives have been put forward for classification, rating, and understanding emotions' affective components. These models are often formulated into illustrations where the structures and measurement of emotions become apparent (Shuman and Scherer 2014: 25 - 29). One of the best known and most cited of such models is Russell's *Circumplex Model of Affect* (1980), which provides a clear two-dimensional circumplex that works appropriately for the needs of the current study.

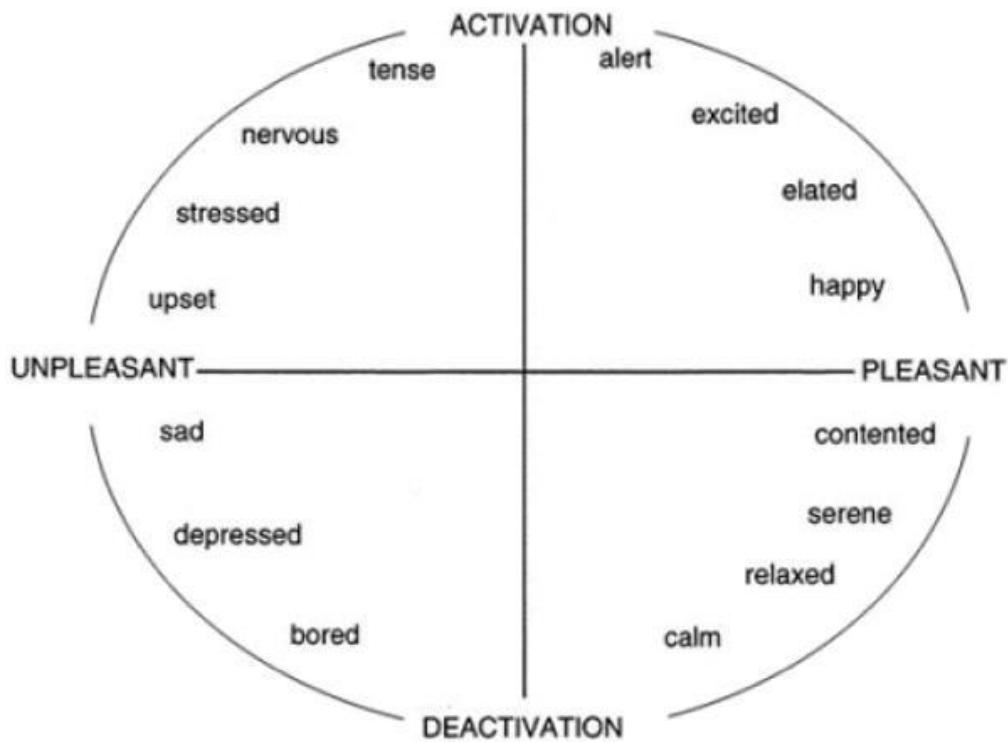


FIGURE 1 CIRCUMPLEX MODEL OF AFFECT

The model includes two continua, one on the horizontal axis and another on the vertical, as can be seen in the example above (Taken from Posner, and Peterson, 2005). The continuum on the horizontal axis is used to rate the valence of emotions, going from positive on one end to negative on the other. The vertical axis is used to rate the activation (sometimes called arousal) caused by emotions, going from low activation on one end to high activation on the other. The activating properties of emotions can be real physiological reactions, such as an increased heart rate or the activation of the nervous system, or perceived mental and physical activation, such as when enjoyment keeps someone interested in something they are doing.

The idea behind the model is that emotional space is continuous instead of categorical or discrete, and emotions can differ from each other by degrees along the two dimensions (Prinz 2012: 200). The two axes in the model create a 2x2 taxonomy, where four broad categories emerge; positive activating, positive deactivating, negative activating, and negative deactivating (Pekrun and Linnenbrink-Garcia 2014: 3). It is to be noted, however, that while the circumplex model allows emotions to be classified and compared, it might not always be clear where each emotion should be situated. Even single emotions can produce different levels of valence and activation. Anxiety, for example, can range from mild discomfort to an absolute fear of social situations altogether.

In summary, the circumplex model of affect can be used to estimate and rate different emotions and emotional experiences based on factors that can be identified

but are also among the most important from the standpoint of human emotions. This is a useful tool when the generalized aim of the study is to make a comparison between two settings in which the experience of students can be assumed to differ by degrees and not discretely.

2.3 Emotional processes

Emotions can arise and get affected by multiple different stimuli and get modulated by them through the systems of human physiology, experience, and perception (Prinz 2012). The systems affect through different processes how we, as humans, feel. These include:

“...situational perceptions, cognitive appraisals, neurohormonal processes, physiological feedback from autonomic nervous system activity, and sensory feedback from facial, gestural, and postural expression” (Pekrun and Perry 2014: 124).

When the main cause for emotions does not include thinking processes and is mostly a reaction to an outside stimulus, such as fear caused by a loud sound, they are thought to be non-cognitive in nature. When emotions are mainly caused by thinking, such as when someone becomes anxious contemplating about what is to come, they are thought to be cognitive in nature. Interestingly, the human cognition and emotions have been argued to be both separate, and interdependent systems (Storbeck and Clore: 2007). The argument for the former is that emotions can arise without cognitive processing and have a temporal priority over it (Zajonc, 1980). The argument for the latter is that emotion can be understood through cognitive processes, which is implying interdependence (Bower, 1981).

It is likely that most emotions are not purely cognitive or non-cognitive in nature, but based on multiple situational and individual factors, both. As Storbeck and Clore (2007) add, cognitive processes are necessary for processing, elicitation, and experience of emotions. Thus, emotions and cognition are not easy to separate as independent from one another. However, from the standpoint of pedagogy, both Zajonc's and Bower's arguments could be used to highlight the situational factors and importance of emotions for learning and teaching. If emotions are able to take over temporal priority over cognitive processing, it means that cognitive processes can no longer be used to their full potential, thus limiting learning capacity. If emotions are interdependent from our cognitive processes, it means that they are not only present during learning, but they are part of it. Prinz (2012), in a similar manner, states:

“Regardless of whether one endorses a cognitive theory, in this sense, it is clear that emotions can influence our cognitive states. These effects can be divided into two kinds: emotions can influence what we think about and they can influence how we think.”

Therefore, emotions are almost always present during learning, affect the processes of learning, and the learning experience itself. These effects are considered in further detail in the following sections.

3 EMOTIONS AND LEARNING

Educational settings include a multitude of emotions and the effects they have on learning are hard to overstate. A large part of young people's lives is spent at school with the goal of achieving something, as different as different people's goals can be. The importance and meaning of these achievements affect the arousal of emotions, but the opposite is also true, as emotions mediate the learning experience before, during, and after it, and can influence the achievements through effects on cognitive processing, motivation, and reactions to success and failure (Fiedler and Beier 2014: 36, Pekrun and Perry 2014: 120). This chapter discusses different aspects of emotions, as well as how different parts of students' lives affect emotions and are affected by them.

3.1 Individual variables

Many things can cause human emotions and the classroom does not diminish these basic functions. Therefore, to look at emotions in the classroom, one needs to look at emotions holistically. Multiple factors can affect the human emotional experience in different settings. Firstly, it is to be noted that the humans themselves who experience the emotions are central to how, why, and which emotions they feel. Intrapersonal factors with a biological basis, such as personality, can affect the experience. For example, Verduyn and Brans (2012) point out that extraverts experience intense and long-lasting positive emotions more often, and people who have high trait neuroticism experience negative emotions in a similar manner. This means that different people can be affected by the same situation very differently. It is possible that an ongoing and hard-to-predict situation like the Covid-19 pandemic can highlight these differences, as any development in the matter can change multiple aspects of people's lives, which consequently causes emotional reactions. Other inherent factors, such as psychological resilience, the capacity for successful adaptation to challenging situations, may be a factor when facing adversity.

Successful adaptation to each newly emerging situation may have a positive impact on students' views of things in the large scale, but most likely also in more specific matters, such as studying and the move to a distance learning setting. Correspondingly, unsuccessful adaptation may be detrimental to students' studies and emotional responses. This can be due to personality traits too, since resilience is positively correlated with the traits of conscientiousness, agreeableness, low neuroticism, and openness to experience (Fayombo 2010: 105, 109 - 111). These phenomena are important to understand and allow a wider perspective of the notion of emotion and its relations to the biology, temperament, and the personality of the individual. However, these factors exceed the scope of the current study, which aims to look at the emotional experience of a relatively large group of students without individual variables apart from the year of study. To add, the aforementioned variables are only one example of the heterogeneity of a group but considering some such aspects can be useful when considering why different students may give vastly different answers about a relatively similar experience.

3.2 Control-Value appraisals

Emotions are very central to how learning and its expected outcomes are perceived. Appraisals, i.e., ones' thoughts and evaluations about the nature of different things affect how they feel about them, and this is found to affect emotions (Prinz 2012: 194). For example, the narrative that students have about the nature of distance learning may affect their experience of it positively or negatively. Pekrun's (2006) control-value theory of achievement emotions aims to explain how appraisals can work as antecedents of learning related emotions. Pekrun (2006) states that students' control and value appraisals are central to how they experience achievement emotions. This means that students' perceived control over a task and the task's perceived value to the students affects the achievement emotions they feel. Pekrun and Perry (2014: 121) define achievement emotions as:

“...affective arousal that is tied directly to achievement activities (e.g., studying) or achievement outcomes (success and failure)”.

However, they also note that:

“...not all of the emotions triggered in academic settings are achievement emotions. For example, topic emotions, epistemic emotions, and social emotions are frequently experienced in these same settings”.

Control-value theory divides the achievement emotions into three-dimensional taxonomy. Two of the dimensions, valence and arousal, are used in a similar manner as in Russell's *Circumplex model of affect* (1980) discussed above. The third, temporal

aspect, divides the emotions based on which part of the process the emotions are experienced in. Thus, three categories are created: activity emotions, prospective outcome emotions, and retrospective outcome emotions. This essentially means that the control-value theory aims to provide information about how the students' beliefs about the task affects how they feel before, during, and after it. The effects of achievement emotions are central to the learning experience and can influence students' learning motivation in an activating or deactivating manner. For example, if the student perceives the task as important and believes that they have the competence to complete it, the outcome is increased enjoyment and decreased boredom and anger. Similarly, if the outcome of the task is perceived as important and the success in the task is thought to be the result of the student's own exertions, it can result in retrospective pride as well as prospective hope (Linnenbrink-Garcia and Barger 2014: 145).

3.3 Foreign language anxiety

Anxiety is the most studied emotion in the foreign language learning context (Dewaele and MacIntyre, 2014). Foreign language anxiety (FLA) can be defined as "the feeling of tension and apprehension specifically associated with second language contexts, including speaking, listening, and learning" (MacIntyre and Gardner 1994). Students who experience FLA experience reduced willingness to communicate, hinder learning and the capability to take part in learning activities and opportunities. This can be very critical, because speaking and taking part in opportunities to practise are known to support second language learning (Khajavy, MacIntyre, Barabadi 2018). FLA can be caused by different factors and can be different for different people and in different situations based on these factors. For clarification, MacIntyre (2007) suggested that FLA should be looked at from three different perspectives: trait anxiety, situation specific anxiety, and state anxiety. Trait anxiety refers to the general patterns of individuals behavior, situation anxiety refers to anxiety in specific situations and the concerns related to establishing specific, typical patterns of behaviour, and state anxiety refers to anxiety as a state where the concern is rooted into a specific moment without consideration of the frequency of the occurring experience in the past or future (Dewaele 2007: 393, MacIntyre 2007: 565). Situational anxiety is a common form of FLA and is often experienced before and during the moments where one has to speak in the foreign language, especially in front of others. Therefore, student presentations are looked at specifically in the current study, as this provides an often-repeated example of a situation where one could feel FLA, and thus allows for a good comparison between the distance and contact learning setting in one specific emotional experience.

3.4 The effects of positive and negative emotions on learning.

As stated in chapter 2.2, one factor that differentiates emotions from one another is their valence. Although positive and negative emotions are often simultaneously considered as two related parts of the human affect, and are differentiated by degrees along a continuum, what they do to our experience can differ drastically. While negative emotions cause strong physiological reactions and action tendencies, positive emotions are thought to cause broad thought-action repertoires (Shuman and Schrer 2014). Physiological reactions and action tendencies mean that when humans experience negative emotions, the nervous system activates and the means to adapt to a situation are actions, such as fighting, fringing, fleeing, or freezing. Evolutionarily these reactions make sense, but in today's world there can be major drawbacks, as the choice of running away or hiding from an anxiety-provoking exam or presentation is probably not a good one. Thought-action repertoires mean that when humans experience positive emotions, they aim to seek information, build resources, and interact and bond with others (Cohn and Fredrickson 2006, Shuman and Schrer 2014: 13). This differs from the action tendencies caused by negative emotions because the actions do not require much from autonomic support, and thus, the behavioral actions caused by positive emotions are less immediate and require lower activity (Levenson 1994: 256). Yet, the significance of thought-action repertoires can be quite vast because they allow humans to be more resourceful and function more optimally. This can lead to compounding effects, as humans are able to build their enduring resources incrementally over time (Fredrickson 2013: 24-25).

Actions associated with thought-action repertoires of positive emotions, such as seeking information, interacting, and bonding with others are very often desirable actions and outcomes in the classroom. While positive emotions may do little in the way of immediate physical activity, their relevance to learning cannot be overstated. What positive emotions can do physiologically is undo negative emotions and shorten the time it takes to return to the physiological baseline, at least when it comes to heart rate. This means that if positive emotions are elicited after stressful negative emotion inducing situations, the effects of the negative emotions become shorter-lived (Cohn and Fredrickson 2006, Fredrickson 2013). Eliciting positive emotions through jokes or other means can come innately in such situations, but perhaps evaluating the situation in order to do so can be harder in computer mediated distance learning classrooms than in face-to-face learning situations, because immediate physical and social cues about the emotionality of the classroom are not as available.

Macintyre and Gregersen (2012) cite Fredrickson's *Broaden and build hypothesis* (2006, 2013) and point out that positive emotions tend to have broadening effects for the human cognitive capacity, which naturally supports learning. They further assert that negative emotions tend to work differently than positive emotions and inhibit

and limit our thinking, which hinders our learning capacity. An example of this is language anxiety, the anxious reaction associated with learning and using second and foreign languages, which tends to cause a worrying and fearful emotional reaction, which hinders the language learner's cognitive capacity at the input, processing and output stages of language production (Macintyre and Gregersen 2012: 103-104). Thus, the difference between learning with positive emotions and negative emotions can be quite vast. The significance of different levels of emotions in the classroom can have a large effect on how the students perceive their learning experience too.

However, although positive emotions are often thought to have positive learning outcomes and negative emotions to have negative learning outcomes, it is important to notice that this generalization is not always correct. The learning outcomes of emotions depend on the type of learning task and the type of emotions experienced (Fiedler and Beier 2014: 39, Pekrun 2017: 216-217). Each emotion causes its own particular physical, cognitive, and affective reactions that distinguish it from other emotions. What also might be a misguided conclusion is that positive emotions in a setting imply the lack of negative emotions.

To bring this point further, the valence of singular emotions does not necessarily mirror its effect on learning. Joy, for example, can keep the student interested in the task, but so can fear of failure, and whilst relaxation is considered a positive emotion state, it does not promote continuation of learning efforts (Pekrun 2017: 216). From the standpoint of emotional differences between contact and distance learning, it could be argued that for some students the comfort of their own home may induce more relaxation than lecture rooms, thus reducing learning efforts. The lack of immediate social contact may reduce the fear of failure and losing face, which can make the learning environment more enjoyable, but also decrease studying motivation induced by the goal of avoiding the feared scenarios. However, Pekrun (2017: 216) notes that while deactivating positive emotions such as relaxation and relief can reduce attention and effort in the moment, these emotions can strengthen learning motivation in the long-term, which causes students to re-engage with learning. If this holds true for an individual student, it can work in their favor in a situation where emotions of this kind are regularly induced, such as when distance learning is the main form of education. To conclude, different ends of the valence continuum and their effects on learning are not straightforward in that positive emotions lead to positive outcomes and negative to negative outcomes, but the opposite and something in-between are also possibilities. These factors may affect the differences in students' emotional experience in the distance and contact learning settings, how the settings are perceived, as well as the achieved learning outcomes.

These variables also shape students' future emotional experience by affecting their emotional processes, such as achievement goals, outcome emotions, and appraisals (Gross 2014: 5, Linnenbrink-Garcia and Barger 2014: 143-144, Pekrun and Perry 2014: 123 - 127). Similarly, Pekrun (2006: 322), also illustrates how students' control

and value appraisals and negative achievement emotions work in a cyclical manner. At each step of task completion, the students' control and value beliefs as well as the achievement situation shapes itself and copes with the outcome. In other words, the prospective beliefs and feelings the students possess evolve through and with the task completion. However, Pekrun (2006: 321) states that the temporal sequence of this appraisal-forming cycle may change based on situational factors and cognitive availability.

3.5 Learning setting and emotions

The main difference between contact and distance learning is that one is mediated through face-to-face interaction and the other is mediated through a computer. Computer mediated interaction and face-to-face interaction differ emotionally based on a few factors. According to Short, Williams, and Christie (1976, as cited by Derks et. al 2008), the most prevalent of these is different sociality and social presence. The concept of presence can be divided into two dimensions, a physical and a social dimension (Manstead et al., 2011: 147-148). The physical dimension refers to one's sense of their own physical location, but also includes physical co-presence; the sense of being located somewhere with someone else. It can also refer to one's sense of being able to relate and communicate with another; being able to see, touch, and communicate non-verbally. The social dimension refers to the communication setting and its norms, the communicator's interpersonal relationship, group memberships, social identities, and the act of communication itself. A computer-mediated interaction, by-design, lacks any physical closeness, although it can create a feeling of being together. However, some physical factors, such as social cues that are expressed with facial and head movements are still present. As social presence is intertwined with physical presence, its effects cannot be completely separated from it. Thus, it is also affected by situations where physical presence is limited.

Social situations can affect emotional responses in multiple ways, as they often include many elicitors for emotional responses. Voices, faces, gestures, expressions and even postures are used to signal emotions, and some of these physical aspects are often listed as descriptive elements of specific emotions (Pekrun and Perry 2014: 124, Prinz 2012). Humans often mirror the emotions of others, and facial expressions and other physical signals can work as elicitors for others' emotions (Levenson 1994: 125). For example, if fear can be seen from the face of others, it is reasonable to assume that there is something to be scared of.

Derks et. al. (2008) note that the identity of the interaction partner and the power relation between the interlocutors affect the amount of emotional expression. They further point out that different social contexts may also have different rules for emotional expression. For example, there are situations where smiling or frowning is

expected when reacting to something that is happening. One could expect others to smile if they tell them about their good grade, and to frown when telling them about a bad grade they got. While the same interlocutors may be present in contact and distance learning, the situational factors can be assumed to have an effect on how the conversation takes place and how it affects the interlocutors emotionally. At its simplest, only choosing who to sit with in the classroom might affect the emotional experience, and this is not possible in the distance learning setting.

3.6 Previous studies

Emotions have not been studied very extensively in the present-day videoconference types of distance learning settings, but the situation caused by the Covid-19 has provided researchers a very suitable means to extend their emotion research into the medium. Lisnychenko, Dovhaliuk, Khamska, Glazunova (2020) studied Ukrainian Pedagogy students' foreign language classroom anxiety during the spring semester 2020, which the pandemic had forced into a distance learning setting. A comparative analysis with the students' foreign language classroom anxiety in the normal classroom setting was also carried out. The comparative analysis showed that the change of medium had considerable positive and negative effects on the different types of students' foreign language classroom anxiety. Whilst the change to a distance learning setting caused an increase in "communication apprehension" and "fear of negative evaluation", there was a decrease in "test anxiety" and "fear of making mistakes". Lisnychenko et. al. analysed the factors that could have caused these changes and concluded that:

"Among the negative-bearing reasons and factors are the following - the changes in the learning context and the character of distance learning, online communication itself, lack of personal contact, Zoom fatigue, deadlines, lack of opportunity to express active listening or understanding by means of backchannelling, lack of verbal emotional support, prompts and feedback from the tutor and fellow-students. The reasons for positive changes in the students' foreign language anxiety levels are - flexibility of the schedule, growing autonomy of the students, weakening of the teacher's control, lack of evaluation on the part of the other more competent students and the teacher, when working synchronically in pairs or small groups in Zoom "session halls", but yet isolated from the whole class, improved test-taking strategies and skills due to regular test-taking practice during the quarantine period."

Stephan, Markus, and Gläser-Zikuda (2019) studied the differences in achievement emotions and control-value appraisals in German University students participating in online and on-campus courses, which prepared the students for a state teacher examination. Achievement emotions are emotions which are directly linked to achievement activities or achievement outcomes (Pekrun 2006: 317). Achievement outcome emotions refer to emotions that arise from the expected outcome of activities, and achievement activity emotions refer to the emotions that arise during the activities. Control-

value appraisals refer to how the students evaluate the control they have over the activities, and the values they associate with them (Pekrun 2006: 317). Stephan, Markus, and Gläser-Zikuda found out that overall teacher students experience more positive than negative emotions in university courses. The students participating in the on-campus course experience fewer negative emotions and more enjoyment than the ones participating in the online course. Interestingly, they assert that the correlations between the variables provide evidence that the differences were not due to the different learning environments, but the different control- and value-appraisals in the two settings. The learning environment only had significant correlation with the achievement emotions, anger and pride.

Lisnychenko et. al. focused on anxiety and apprehension in the beginning of the pandemic, and Stephan, Markus, and Gläser-Zikuda focused on one course structure through the lens of control-value appraisals. The current study aims to seek information about emotions in distance and contact learning with a slightly broader perspective, by focusing on multiple different emotions and overall learning experience of students. This allows a more comprehensive view of the diverse situation, where distinctive details may be especially important for students' studies and well-being. Additionally, the situation where the current study was followed through was different than that of previous studies, because all participants had relatively recent experiences of both distance and contact learning, and rapid changes appeared to be in the past. This eliminates the selection biases that exist when comparing groups that have chosen to participate in certain form of teaching, and also some of the negative aspects that rapid changes may have caused in students.

4 THE PRESENT STUDY

The aim of this chapter is to give an overview of the present study. Firstly, the aims and research questions are introduced. Secondly, the data collecting methods are discussed and the relevant information about the participants is provided. Finally, the method of analysis is detailed.

4.1 Aims and research questions

The aim of this study is to learn about various emotional differences that the contact and distance learning settings cause in higher education language students. While there have been studies about distance learning, computer mediated interaction, and lately about the effects of Covid-19 pandemic on learning and teaching, the emotions in the two settings have not been compared in a same study. When the pandemic situation started to look better in 2022, an opportunity to compare students' emotions opened, as the students had more recent experiences of both settings. Additionally, the higher education language teaching at The University of Jyväskylä included active participation classroom methods in both settings. Thus, the emotional differences of the settings are more comparable, as opposed to distance learning methods that were used more before the pandemic, such as self-study book examinations and recorded lectures, which do not include active interactions and participation. The following research questions were formulated in order to study these emotional differences.

1. How do language students perceive contact and distance learning to be different emotionally?
2. What do language students perceive as the cause of these differences?
3. What emotional differences do language students perceive in giving a presentation in contact and distance learning settings?

4.2 Data collection

An online questionnaire was used as a method of data collection. The majority of the questionnaire consisted of Likert-rating scale items. These items were formulated to specifically compare the students' emotional experience in the contact and distance learning setting. Thus, the questionnaire included items about the overall emotional experience, such as positive and negative emotions in the settings, items about situational factors that frequently elicit learning related emotions, such as speaking in the foreign language, and items about specific learning related emotions, such as focus and joy. Some items also aimed to provide information about identifiable aspects that differentiate the contact and distance learning experience, such as the physical presence of others and the physical versus virtual nature of contact and distance learning classrooms. The Likert-scale was used as it provides numerical ratings that allow overall emotional differences to be studied (Dörnyei 2007: 104 – 105).

Whilst questionnaire surveys allow large amounts of data to be gathered, without follow-up qualitative components the data does not provide much information about the nuanced and complex nature of the meaning or the engagement that the respondents perceive and have with the topic (Dörnyei 2007: 170). Thus, additional open-ended questions were formulated to better understand the thought processes behind each scaled item, and to further develop the analysis. The open-ended questions asked the students about the situations in which they experience learning-related emotions, and how the experience differs in the two studied settings. One question about the factors that have affected the students' overall positive and/or negative experience with distance learning is also included. This question aims to further expand on what influences the emotional experience in the distance learning setting. This provides useful information not only for the current study, but also sheds light into the concept of distance learning overall. The questionnaire was distributed to the participants through The University of Jyväskylä mailing lists. Information of the usage of the data was provided at the beginning of the questionnaire. Participation in the study was voluntary, and the answers were collected anonymously.

4.3 Method of data analysis

The data is analyzed both qualitatively and quantitatively. Each Likert-scale option was analyzed individually. The answers were analyzed based on the agreement of all participants, which provided a good overall view of the differences in the two settings. The differences were used to identify thematic consistencies between all results. The identified themes were bridged together with answers from the open-ended questions, where thematic analysis was used to identify recurring themes and patterns (Braun and Clarke 2006). If the themes in the numerical data corresponded with the themes found in the open-ended question answers, the connection was identified, and both sets of data were analyzed together. Appropriate examples were chosen and provided to give background information about possible reasons for the amount of agreement in the Likert-scale statements. Answers from the first two open-ended questions were used as examples when the reasons behind the results from the Likert statements were considered. The examples were chosen based on how accurately they depicted the results in the numerical data, as well as how understandable they were. This enabled a more comprehensive view of what factors affect emotions in the two settings. The final open-ended question was considered separately.

4.4 Participants

The participants were 55 higher education language students from the University of Jyväskylä. Out of the 55 participants, all 55 answered the Likert-statement part of the questionnaire. However, some participants had not rated their agreement in all the statements, and thus the number of answers varies across different statements, but the sample size is reported when each statement is considered. The first two open-ended questions were answered by 44 participants, and the last question was answered by 42 participants. The lack of answers did not significantly affect the analysis, because each Likert-item was analyzed independently, and the focus was on the overall agreement and not specific few percentile differences between different scaled items. The answers from the open-ended questions also provided enough background information to expand the analysis that was made based on the Likert-scale answers.

Originally the students' study year was also asked in the questionnaire, but ultimately the groups were too small to provide any meaningful comparisons, and thus all answers were looked at together.

5 FINDINGS

This section introduces the findings of the current study. The first chapter after this part aims to present results that reflect the overall emotionality in the two settings. After this, more specific emotions and factors that are associated with them are discussed and considered together with results from the open-ended questions.

5.1 General findings

While the results of the study lend themselves quite well for some conclusions about emotions in distance and contact learning settings, the overall picture is not simple and the answers are far from homogenous. This is to be expected as an unquantifiable number of factors affect the students' emotions and beliefs about the points in question. Overall, it can be asserted that most students experience more positive emotions in contact learning but see and experience some positive aspects in distance learning too. The emotional differences between the settings, however, can be very noticeable. *Table 1* below highlights the agreement to two statements that emphasize the overall experience.

TABLE 1 OVERALL EMOTIONALITY

I like distance learning more than contact learning (Statement 12, n=54).					
Agreement	1	2	3	4	5
Result	16	13	16	6	3
Percentage	29.6 %	24.1 %	29.6 %	11.1 %	5.6 %
I experience different emotions in distance learning than in contact learning (Statement 14, n=55).					
Agreement	1	2	3	4	5
Result	0	2	13	33	7
Percentage	0.0 %	3.7 %	23.6 %	60.0 %	12.7 %

1= strongly disagree, 2= disagree, 3= neither agree or disagree, 4= agree, 5=strongly agree

As *Table 1* shows, 53.7% of the participants do not agree to liking distance learning more than contact learning, and 29.6% do not agree or disagree. Thus, over half of the participants' overall evaluation of the distance learning setting is negative, which is likely to cause more negative emotions, but this could also work the other way around, and the negative emotions could be causing the dislike of the setting. This can create a cycle of negative appraisal, where the emotions strengthen the evaluation and the evaluation strengthens the emotions, and therefore the learning experience suffers significantly. Also noticeable is how small the percentage of agreeing students is comparatively. Only 15.7% of the participants like distance learning more. These results seem to underline the usage of distance learning in language studies altogether.

The second statement in *Table 1* shows an unspecific, but interesting result which does not provide much for analysis but allows to set the tone for the rest of the study. 60% of the participants agree and 12.7% strongly agree that distance and contact learning settings are not emotionally similar. Thus, the two settings cause different emotional reactions for most participants, which means that the effects of emotions on learning are also different.

5.2 Overall positivity and negativity in distance learning

This section introduces the results from the Likert statements regarding the overall positive and negative emotions in the distance learning setting, and ties together with a statement about joy to provide further implications. The statements: *I feel more negative emotions in the distance learning setting than in the contact learning setting*, and: *I feel more positive emotions in the distance learning setting than in the contact learning setting* took into account both ends of the valence continuum, while also providing a comparison between the two settings.

TABLE 2 NEGATIVE AND POSITIVE EMOTIONS

I feel more negative emotions in the distance learning setting than in the contact learning setting (Statement 5, n=55).					
Agreement	1	2	3	4	5
Result	3	14	7	19	12
Percentage	5.5 %	25.5 %	12.7 %	34.5 %	21.8 %
I feel more positive emotions in the distance learning setting than in the contact learning setting (Statement 9, n=55).					
Agreement	1	2	3	4	5
Result	14	20	16	4	1
Percentage	25.4 %	36.4 %	19.1 %	7.3 %	1.8 %

1= strongly disagree, 2= disagree, 3= neither agree or disagree, 4= agree, 5=strongly agree

The agreement to statement 5: *I feel more negative emotions in the distance learning setting than in the contact learning setting* is not unambiguous. As Table 2 indicates, 31% disagree or strongly disagree, 12.7% neither agree or disagree, and 56.3% agree or strongly agree. In other words, over half of the participants feel that their emotional experience is more negative in the distance learning setting, whereas around a third do not feel more negative emotions. Thus, it is likely that some aspects of distance learning cause others to feel more negative emotions, whereas for some the setting is emotionally more positive or neutral. The open-ended question answers give many possible reasons to support both sides. The reasons students reported in all the open-ended questions for feeling more negative emotions are, for example, the lack of visible facial

expressions and gestures, lack of contact, the difficulty of starting a discussion when cameras are off, feeling less “real”, boredom, others being passive and not taking part, the difficulty and anxiety associated with taking a turn to speak, not knowing whether the teacher will nominate you to speak, and everyone just seeing the speaker while the speaker does not see others. The reported positive sides focus on the disconnect- edness in distance learning, for example, not seeing others, possibility to keep camera off not to be visible, possibility to use notes without others seeing, possibility to retract if feeling so. A few participants also report feeling less nervous and anxious. Like the results from statement 5 already indicated, there is no one general agreement with the negative emotions in distance learning. Some of the same things that other partici- pants report as negative are positive to others. This, of course, happens in every ped- agogical practice. Acknowledging the fact enables a greater balance between the two.

The second statement about the overall emotional experience, *I feel more positive emotions in the distance learning setting than in the contact learning setting* also produced quite a lot of distribution in agreement, but not similarly to statement 5. As *Table 2* indicates, 25.4% of the participants strongly disagreed, 36.4% disagreed, and 29% nei- ther agree or disagree. Agreement or strong agreement was only reported by 9.2% of the participants. This seems to indicate that some students who do not agree to feeling more negative emotions in the distance learning setting do not necessarily feel more positive emotions in it either. If the 17 disagreeing participants’ answers are separated from the data, this is in fact the case, as only four of them report agreement or strong agreement to feeling more positive emotions. The high number of participants who neither agreed or disagreed could be assumed to be due to a more neutral or “flattened” emotional experience in the setting. The open-ended question answers also indicated that some of the participants feel this way, as can be seen from the following quote:

“Vierustoverit, vuorovaikutus kasvokkain, ilmeet, eleet jne. Tekevät opetustilanteita vi- vahteikkaampaa ja sen myötä nautinnollisempaa. Vertaistuki on läsnä, ja olo, että kaikki me täällä opitaan yhdessä. Etänä ”minä ja muut” tunne on vahvasti läsnä, eikä yhteisölli- syyttä / ryhmädynamiikkaa synny.”

“People sitting next to you, face-to-face interaction, facial expressions, gestures etc. make the learning situation more lively and therefore more enjoyable. Support from peers is pre- sent and there’s a feeling that we’re all here learning together. In the distance learning set- ting “me and everyone else”- feeling is strongly present, and no sense of commu- nity/group dynamics are formed”

The agreement to the statement: *I experience more joy in the contact learning setting than in the distance learning setting* further complicates the implications than can be drawn from the previous results.

TABLE 3 JOY

I experience more joy in the contact learning setting than in the distance learning setting (Statement 8, n=53)					
Agreement	1	2	3	4	5
Result	0	6	5	21	21
Percentage	0.0 %	11.3 %	9.5 %	39.6 %	39.6 %

1= strongly disagree, 2= disagree, 3= neither agree or disagree, 4= agree, 5=strongly agree

As can be seen in *Table 3* above, there is 39.6% strong agreement and 39.6% agreement on this statement. This means that the results from the two statements that relate distance learning to contact learning in *Table 2* are not fully representative of the emotional experience in the contact learning setting, or in the case of more specific emotions. In other words, since the percentage of agreement to feeling more joy in the contact learning setting than in the distance learning setting is higher than the percentage of agreement or disagreement on the other statements, it cannot be concluded that joy in contact learning would always lead to feeling less positive or more negative emotions in distant learning than in contact learning. This high agreement does have its own meaning too, since joy is an important positive emotion in the learning experience. Pekrun (2017: 216) places joy into the category of activating prospective and retrospective emotions, which means that it is associated with positive future and past learning experiences. However, the wording of the statement implies that the emotions are felt during the participation in the setting. It is therefore possible that the answers are better associated with the word “enjoyment”, which Pekrun places in the category of activity emotions, which would mean that these emotions are especially present during learning tasks. It is also possible that the correspondence between the Finnish word “ilo” (in the questionnaire), and the English word “joy” is not perfect, as is often the case in emotional vocabulary in different languages (Pavlenko 2008: 151). Nevertheless, it is important to note that most participants feel more joy in the contact learning setting, and this can have great value for learning and overall well-being of students. This, however, does not mean that the overall emotional experience in contact learning is more positive for all students.

The participants were also asked to rate their agreement with experiences of success in the two settings, and similar results emerged. Being successful in a task and the consequent feelings of accomplishment do not only create positive emotions in the moment but can also change the students’ perceptions and appraisals. Thus, the feelings of success can lead to strengthening perceived control in consequent tasks and create achievement emotions, such as joy, during their completion.

5.3 Nervousness and language anxiety

TABLE 4 NERVOUSNESS AND LANGUAGE ANXIETY

Speaking in a foreign language makes me more nervous in distance learning than in contact learning (Statement 3, n=55)					
Agreement	1	2	3	4	5
Result	16	18	9	9	3
Percentage	29.1 %	32.7 %	16.4 %	16.4 %	5.4 %
I feel less anxiety in distance learning than in contact learning (Statement 4, n=55)					
Agreement	1	2	3	4	5
Result	11	9	16	12	7
Percentage	20.0 %	16.4 %	29.1 %	21.8 %	12.7 %

1= strongly disagree, 2= disagree, 3= neither agree or disagree, 4= agree, 5=strongly agree

As can be seen in *Table 4* above, the questionnaire included two statements regarding nervousness and language anxiety in the two settings: *Speaking in a foreign language makes me more nervous in distance learning than in contact learning* and *I feel less anxiety in distance learning than in contact learning*. 29.1% strong disagreement and 32.7% disagreement with the first statement provided some proof that distance learning can reduce feelings of apprehension. The agreement with the second statement was distributed more evenly across the options, with 36.4% overall disagreement, and 34.5% overall agreement. These results seem to contradict previous research, as language anxiety has been found to be most prevalent in learning situations where students must speak in the foreign language (Tsiplakides and Keramida 2009: 40). In other words, feeling more nervous when speaking the foreign language should consequently increase overall anxiety, but the agreement with the second statement does not correspond to this hypothesis. The open-ended questions give possible explanations for these results. Firstly, students report that the act of taking a turn in distance learning can be anxiety-inducing, as they must turn on their microphones and cameras and decide to become the centre of attention, whereas in contact learning they can better evaluate the overall classroom situation and raise their hands. As one student summarises:

“Etäopetuksessa valmistautumatta vastaaminen aiheuttaa enemmän ahdistusta, sillä tällöin ei ole edes millään tavoin pystynyt opettajan kehonkielestä päättelemään, että hän valitsee minut vastaamaan, ja näin vastaaminen tulee vielä enemmän yllätyksenä. Toisaalta taas, lähiopetuksessa ahdistusta lisää se, että näkee muiden opiskelijoiden katseet.”

“Answering without preparation causes more anxiety in distance learning, as you cannot guess that the teacher will choose you to answer based on their body language, and then answering comes even more as a surprise. On the other hand, seeing other students’ looks in contact learning can increase anxiety”

Secondly, it is much easier to choose who to speak with when doing group work in contact learning, because the groups are not randomised with the videoconferencing application but chosen. The effects of this can be highlighted if other students will not turn on their cameras. Thus, students have to evaluate whether they want to start a discussion with someone that they necessarily do not know, but also cannot see.

5.4 Relaxation, focus, and boredom

This section introduces statements regarding relaxation: *I feel more relaxed in distance learning than in contact learning* and focus: *It is easier to focus in contact learning than in distance learning*, and relates their significance to the other results.

TABLE 5 FOCUS AND RELAXATION

It is easier to focus in contact learning than in distance learning (Statement 15, n=55)					
Agreement	1	2	3	4	5
Result	2	4	2	17	30
Percentage	3.6 %	7.3 %	3.6 %	30.9 %	54.6 %
I feel more relaxed in distance learning than in contact learning (Statement 10, n=55).					
Agreement	1	2	3	4	5
Result	3	3	12	22	15
Percentage	5.4 %	5.5 %	21.8 %	40.0 %	27.3 %

1= strongly disagree, 2= disagree, 3= neither agree or disagree, 4= agree, 5=strongly agree

Table 5 shows one of the most unambiguous results of this study. The majority of participants, 54.6%, strongly agreed, and 30.9% agreed that it is easier to focus in contact

learning than in distance learning. It is of course not clear whether this strong agreement is produced by the fact that there is something in contact learning that helps students focus or is there a major downfall in distance learning that produces the result, or both. However, such significant agreement does show that for the vast majority, contact learning provides clear benefits in this regard, as a better focus can create much better learning outcomes. Only 9.9% of the participants strongly disagreed or disagreed with the statement, the possible reason for which can also be found in the open-ended questions, where one student says the following:

“Pystyn olemaan luennolla rennommin, kun voin vaikka makoilla sohvalla. Pystyn myös keskittymään etäluennoilla paremmin, kun pystyn tekemään samalla jotain muuta, esim. käsitöitä.”

“I feel more relaxed in the (distance learning) lecture, as I can just lay on the couch for example. I can also focus better because when I can do something else at the same time, like handicrafts”

Many other participants agree with this students' assessment about relaxation, as quite a lot of agreement was also found with statement 10: *I feel more relaxed in distance learning than in contact learning*. As Table 5 shows, 40% of the participants agreed and 27.3% strongly agreed, 21.8% neither agreed or disagreed, and 10.9% disagreed or strongly disagreed with the statement. The previous quote by the student also specifies one reason for why relaxation is more common in the distance learning setting; the comfort of lecture rooms simply does not match the comfort of home. The overall high agreement to relaxation may also highlight the reason for lessened focus in distance learning, as relaxation is a positive, but deactivating emotion, and thus often reduces active learning efforts (Pekrun 2017: 216). Lessened active learning efforts would subsequently lead to lessened focus on the objects of learning. However, it is entirely possible that the direction of the causality is the opposite, so that once focus decreases, relaxation increases, or bi-directional, so that both affect each other in the previously mentioned manners. The questionnaire also included one statement about boredom, which further reflects and affects these results about relaxation and focus.

TABLE 6 BOREDOM

I get bored more easily in contact learning than in distance learning (Statement 6, n=55).					
Agreement	1	2	3	4	5
Result	27	14	5	6	3
Percentage	49.1 %	25.4 %	9.1 %	10.9 %	5.5 %

1= strongly disagree, 2= disagree, 3= neither agree or disagree, 4= agree, 5=strongly agree

As can be seen from *Table 6* above, 49.1% of students strongly disagreed, and 25.4% of students disagreed with the statement: *I get bored more easily in contact learning than in distance learning*. Like relaxation, boredom is a deactivating emotion, but unlike relaxation, it has a negative valence (Pekrun, Goetz, and Daniels 2010: 532). Pekrun, Goetz and Daniels (2010) associate boredom with lack of concentration and increased distractibility, which means that boredom may be the reason behind decreased focus and the consequent relaxation in distance learning. Possible reasons for lessened focus as well as increased relaxation and boredom can be found in open-ended question answers. Many students think that the human contact, interactions, and overall connect- edness of the social environment is not the same in distance learning as it is in contact learning and feel that this relatively weakens their emotions and prevents some emo- tions from appearing altogether. As one student reports the difference between con- tact and distance learning:

“Etänä kaikki tuntuu laimeammalta, koska kaikki on etäällä ja on vaikeampaa keskittyä”

“Everything feels diluted in distance learning, because everything is distant, and it is harder to focus”

This can mean that the distance learning setting overall elicits emotional disconnect- edness, where students are not as part of the situation as they would be in contact learning, and thus feel bored, stop focusing, and make themselves comfortable by re- laxing.

5.5 Presentation giving in distance and contact learning

Statements about giving a presentation provided a good base for comparing distance and contact learning settings, because it is hard to point out any other learning situation that would be as universal across higher education courses, while still sharing specific similarities, such as being the center of focus, having to prepare, and use the foreign language. The three statements about presentation giving were among the few statements that positively favored distance learning over contact learning emotionally. Additionally, feelings of success are also considered in this section, because during presentations individual successes are visible to others as well.

TABLE 7 PRESENTATION GIVING

It is easier to give presentations in distance learning than contact learning (Statement 20, n=55)					
Agreement	1	2	3	4	5
Result	7	6	10	18	14
Percentage	12.7 %	10.9 %	18.2 %	32.7 %	25.5 %
I feel more nervous while giving presentations in distance learning than in contact learning (Statement 21, n=54)					
Agreement	1	2	3	4	5
Result	16	23	10	2	3
Percentage	29.6 %	42.6 %	18.5 %	3.7 %	5.6 %
I feel more anxious before giving presentations in contact learning than in distance learning (Statement 22, n=23)					
Agreement	1	2	3	4	5
Result	2	7	4	27	15
Percentage	3.6 %	12.7 %	7.3 %	49.1 %	27.3 %

1= strongly disagree, 2= disagree, 3= neither agree or disagree, 4= agree, 5=strongly agree

As can be seen in *Table 7* above, 58.2% of the participants agreed or strongly agreed with the statement: *It is easier to give presentations in distance learning than contact learning*. There are multiple variables that can affect this. For example, in the open-ended questions one student points out that they think that it is convenient to give presentations in distance learning, as screen sharing is easy. However, the two other statements give a more comprehensive view about the emotional factors affecting presentation giving, which are also very likely to be among the variables that affect the feeling of ease. 42.6% of the participants disagreed and 29.6% strongly disagreed with the statement: *I feel more nervous while giving a presentation in the distance learning setting*. Similarly, 49.1% of the participants agreed, and 27.3% strongly agreed that they feel more tension in the contact learning setting before giving a presentation. Therefore, giving presentations can cause more nervousness and tension before and during presentations in contact learning for the majority of students, but not as many agree that presenting is easier in the setting.

TABLE 8 FEELINGS OF SUCCESS

If I succeed in distance learning, the feeling of success is stronger than in contact (Statement 11, n=54).					
Agreement	1	2	3	4	5
Result	9	28	14	3	0
Percentage	16.7 %	51.8 %	25.9 %	5.6 %	0.0 %

1= strongly disagree, 2= disagree, 3= neither agree or disagree, 4= agree, 5=strongly agree

As *Table 8* indicates, 16.7% of the participants strongly disagreed and 51.8% disagreed with the statement: *If I succeed in distance learning, the feeling of success is stronger than in contact learning*. If this is considered from the standpoint of presentations, it means that while presentations cause less nervousness and anxiety, and are easier to hold in distance learning, being successful does not necessarily feel as good. Thus, the overall emotionality may also be less strong when it comes to positively valenced emotions.

Presentations were also mentioned often in the open-ended questions about which situations often elicit learning related emotions. This highlights the fact that presentation giving is among the tasks where learning related emotions are most prominent. There were not as many answers in the follow-up question regarding the emotional differences in the two settings, but a similar theme arose across the answers that considered the topic. One student says the following:

“...esim. esitelmää pitäessä etäopetuksessa hermostuttaa vähemmän, koska ei tule sellaista tunnetta, että kaikki katsoisivat minua.”

“...for example, I’m less nervous while giving a presentation in distance learning, because I don’t feel like everyone’s watching me”

Thus, the differences in the emotional experiences can be caused by the differences in physical presence of others, and the difference in subjective perception of the situation. The results about physical presence and physical learning space are reported in the following section.

5.6 Physical presence and physical learning space

The questionnaire included four statements about the physical presence of others and the physical learning space. This section first introduces the results about physical presence of others, and after that the results about the physical learning space.

TABLE 9 PHYSICAL PRESENCE OF OTHERS

The physical presence of others strengthens my emotions (Statement 16, n=55)					
Agreement	1	2	3	4	5
Result	1	3	10	25	16
Percentage	1.8 %	5.5 %	18.2 %	45.4 %	29.1 %
The physical presence of others makes my emotions appear faster (Statement 17, n=55)					
Agreement	1	2	3	4	5
Result	0	5	21	18	11
Percentage	0.0 %	9.1 %	38.2 %	32.7 %	20.0 %

1= strongly disagree, 2= disagree, 3= neither agree or disagree, 4= agree, 5=strongly agree

As *Table 9* shows, there is agreement with both, physical presence of others strengthening emotions and making them appear faster, but particularly the former. The 45.4%

agreement and 29.1% strong agreement to the statement: *The physical presence of others strengthens my emotions* indicates that the social aspects of the two learning settings can be the cause for differences between them. These can be factors such as overall increase of emotional stimuli, more social interactions, more connectedness, and the overall feeling of communality.

There is also agreement with physical presence making emotions appear faster, but not to the same degree as strengthening them. A large part of participants, 38.2% do not agree or disagree with the statement *The physical presence of others makes my emotions appear faster*. Thus, the physical presence of others does have a strengthening effect on most participants' emotions, but not in a manner that would make them appear faster. Nevertheless, others' presence in contact learning is likely to be a part of the different emotionality and the way it is experienced in the two settings.

Additionally, another statement about the strength of emotions in the questionnaire: *I feel stronger emotions in distance learning than in contact learning* did not produce as strong results as the first statement. As can be seen from *Table 10* below, 16.4% strongly disagreed, 38.2% disagreed, and 38.2% neither agreed or disagreed with the statement. Therefore, 74.5% of students agree that the presence of others strengthens their emotions, but not as many disagree that their emotions are stronger in distance learning. Thus, other factors that affect the overall strength of emotions in the setting most likely exist.

TABLE 10 STRENGTH OF EMOTIONS

I feel stronger emotions in distance learning than in contact learning (Statement 13, n=55).					
Agreement	1	2	3	4	5
Result	9	21	21	2	2
Percentage	16.4 %	38.2 %	38.2 %	3.6 %	3.6 %

1= strongly disagree, 2= disagree, 3= neither agree or disagree, 4= agree, 5=strongly agree

Similar results were found in the statements about physical learning space. As can be seen from *Table 11* below, 40% of the participants agreed and 36.4% strongly agreed with the statement: *Studying in a physical lecture room makes my learning experience more exciting*. These results do not provide means for further analysis, and physical learning spaces are not mentioned in the open-ended questions either. It can be assumed that the result is partly affected by the people in the learning space, but some participants might just enjoy the space, architecture, or the psychological priming effects of the

space, i.e., the feeling that the space is for learning. On its own, this result means that some part of the students' enjoyment in contact learning is due to the lecture hall and things that can be associated with it. Similarly, 34.5% participants disagreed and 45.5% strongly disagreed with the statement: *Studying in a physical lecture room makes my learning experience more negative*. While this statement does not, again, provide much in the way of analysis on its own, it is interesting from the point of view of practical benefits, which are reported below in further detail. In short, while most students dislike the commutes and the negatives of scheduling when having to get to different learning spaces, it does not make them think that the spaces themselves are negative or unnecessary. In fact, quite the contrary appears to be the case, which is especially indicated by the amount of strong disagreement.

TABLE 11 PHYSICAL LEARNING SPACE

Studying in a physical lecture room makes my learning experience more exciting (Statement 18, n=55)					
Agreement	1	2	3	4	5
Result	0	6	7	22	20
Percentage	0.0 %	10.9 %	12.7 %	40.0 %	36.4 %
Studying in a physical lecture room makes my learning experience more negative (Statement 19, n=55)					
Agreement	1	2	3	4	5
Result	25	19	7	4	0
Percentage	45.5 %	34.5 %	12.7 %	7.3 %	0.0 %

1= strongly disagree, 2= disagree, 3= neither agree or disagree, 4= agree, 5=strongly agree

5.7 Practical positive and negative aspects of distance learning

The references to the open-ended questions thus far have focused on the first two open-ended questions. The final open-ended question asked the students about the factors that have affected their experience of distance learning positively or negatively, and a few recurring themes could be found from the answers. Firstly, from the 42 answers, 24 included some reference to the fact that distance learning has offered

flexibility and freedom in course participation and completion, scheduling, and geographical positioning. Many participants feel that they have more time before and between lectures and are happy about the fact that they do not have to commute to lectures and can choose where they live freely. One participant says the following:

“kokemukseni etäopetuksesta on pääosin positiivinen, sillä minusta on ihana pystyä opiskelemaan kotoa käsin. ei tarvitse herätä aikaisin aamulla sen takia että täytyy ehtiä koululle kahdeksaksi, voin rytmittää muutenkin omaa elämäni paljon vapaammin ja päättää esimerkiksi missä katson luentoni”

“My experience with distance learning has been mostly positive, because it’s great to be able to study from home. You don’t have to wake up early in the morning because you have to make it to school by eight. I can also schedule my life more freely and decide where I want to watch my lectures, for example”

This result indicates that many students find a lot of positives in distance learning, which provides further insight into the previously introduced, partly contradicting results. The fact that there are practical benefits may explain why the percentage of students that disagree with liking distance learning more than contact learning is less than both the agreement to better focus and the agreement to experiencing more joy in contact learning. In other words, despite the fact that students recognize distinctive emotional and learning benefits in contact learning, the practical benefits of distance learning are found significant when comparing the two settings.

The second theme that rises from the answer is the annoyance towards poorly organized and constructed courses and teaching, which was reported in 14 out of 42 answers. Many participants feel that the switch from contact learning to distance learning reduced the quality of courses and made different courses’ completion very similar. For example, one student describes the situation as follows:

“Myös huonosti järjestetty etäopetus aiheuttaa turhautumista esim. jos opettaja ei opeta vaan antaa vaan paljon itsenäisiä tehtäviä”

“Badly arranged teaching also causes frustration in distance learning. For example, if the teacher does not teach but only gives a lot of exercises for self-study”

There are also a couple of comments that report this conversely, saying that if the teaching has been good, distance learning has been more enjoyable. 11 participants also say that distance learning classes are harder to focus on while citing similar reasons as above.

As for the final theme, in 17 out of 42 answers there is a reference to themes regarding the lack of sociality in distance learning. The participants report things such as lack of communication, contact, face-to-face interaction, and bonding. This is also reflected a lot in the second open ended question, where 29 out of 44 participants say that the aforementioned factors are the main difference between the two settings. Here is one description:

”Negatiivista: sosiaaliset kontaktit vähentyvät, positiiviset oppimisen tunteet laimentuvat etänä, kiinnostavat keskustelut luentosalissa vähentyvät”

Negative (in distance learning): social contacts have been reduced, positive learning experiences are diluted, interesting conversation during lesson have been lessened”

In the answers of both questions a few students say that this is to the point of loneliness, which is alarming. These results most likely tie in with many of the other results of this study through the overall distance learning experience, as these social aspects and the presence of others is one of the key differences between face-to-face and computer mediated learning.

6 DISCUSSION

The aim of the present study was to provide information about how higher education language students perceive the emotional differences in contact and distance learning classroom settings and find out possible reasons for these differences. Relating distance learning to the setting that has been considered normative for a long time allows a critical view of both settings and presents a mean for comparisons. This enables further understanding to be built on why and how emotions influence learning in different settings. This is crucial for developing better pedagogical practices, as well as understanding how the benefits of the available tools for computer mediated learning can be maximized and used in tandem with contact learning practices. This section gives an overview of the results and considers the research questions in detail.

The answer to the first research question: *How do language students perceive contact and distance learning to be different emotionally?* is multifold. What is clear is that, overall, most language students perceive contact learning as more positive than distance learning. However, the results show that this does not necessarily mean that students experience more negative emotions in distance learning. This can be due to flattened emotional experience distance learning, where neither positive nor negative emotions are felt. The agreement with a statement regarding the strength of emotions in distance learning also reflected this, as only four students agreed to feeling stronger emotions in distance learning.

The participants reported strong agreement and disagreement with statements that included more specific emotions. These results indicated that the majority of language students experience more joy and feel more focused in contact learning but feel more relaxed and more bored in distance learning. These results are in line with the study conducted by Stephan, Markus, and Gläser-Zikuda (2019). They concluded that teacher-students experienced fewer negative emotions and more joy in contact learning settings, both of which are also results of the current study. However, the results of the current study do not provide evidence for their other conclusion that the

differences are due to control-value appraisals, and not the settings. Thus, further investigations would be needed.

The results about anxiety and apprehension were not as conclusive as the aforementioned results of the current study. Over half of the participants disagreed with feeling more nervous when speaking in the foreign language in distance learning than in contact learning. However, similar amounts of both agreement and disagreement were found with a statement regarding feeling less anxiety in distance learning. Thus, some students may feel less nervous when speaking in the foreign language, but still feel anxious in distance learning for other reasons. To conclude, contact learning is perceived as more positive than distance learning, and students feel more positive activating emotions, such as focus and joy in the setting. Distance learning is perceived as more negative, or neutral, and students feel more deactivating emotions in the setting, such as relaxation and boredom. Students also feel less nervous when speaking in the foreign language in the distance learning setting, but agreement with language anxiety is more divided, which is partly contradicting previous research, where feelings of apprehension are especially prevalent when learners have to speak the foreign language (Tsiplakides and Keramida 2009). The results of the current study are also quite opposite from what Lisnychenko, Dovhaliuk, Khamska, Glazunova (2020) showed in their study. They found that the change of mediums caused an increase in communication apprehension and fear of negative evaluation by other students and the teacher, both of which are related to anxiety when speaking in the foreign language. However, this may be due to the different times of conducting the study (beginning and end of pandemic) and cultural differences.

The second research question: *What do language students perceive as the cause of these differences?* has as many answers as there are emotions and factors that affect them. Factors that were considered in the Likert-statement part of this study were physical presence of others and physical learning space, two things that primarily differentiate distance learning from contact learning. The large majority of the participants agreed with a statement about physical presence of others strengthening their emotions, and around half agreed with a statement stating that this makes their emotions appear faster. Therefore, there is a high likelihood that physical presence of others is among the reasons that cause differences in emotions in the two settings. This was also highly reflected in the open-ended part of the questionnaire, where others' presence was more frequently addressed than other factors. If these results are looked at from the standpoint of Manstead et al. (2011) division of presence to social and physical dimensions, it appears that both are affected. Even when distance learning limits the social dimensions much less than the physical dimensions, in the lack of physical presence the students' group memberships, interpersonal relationships, and especially the act of communication are all affected. Thus, physical presence remains prerequisite for many forms of social bonding and cannot be substituted by computer mediated interactions.

Statements about physical learning space also produced similar agreement as the previous statements. Participants' agreement indicated that physical learning space makes learning more exciting for most, and that physical learning space will not make learning more negative. These results did not seem to be affected by the fact that students' often view distance learning as a more practical option than contact learning. This was shown in the final open-ended question answers, where many students reported reduced commuting and scheduling times, as well as freedom of geographical positioning as positive background factors that relate to distance learning. Thus, even when practical factors make physical learning spaces unfavorable, it does not affect students' emotions negatively in the learning settings they provide.

In short, there are many factors that affect the reasons behind emotional differences in contact and distance learning. This study provided evidence for two of these factors, physical presence of others and physical learning space. The results showed that both affect the emotions in the settings. Particularly strong agreement was found about physical presence of others making emotions stronger, and physical learning space making learning more exciting. Even stronger was the disagreement about physical learning space making learning experiences more negative. What needs to be noted, however, is that answers regarding physical presence of others and physical learning spaces are likely to be connected, because physical lecture rooms often come with the presupposition that there are other learners in the same space. Thus, some of the excitement that is associated with the learning space may be created by the atmosphere that comes from other learners in the space.

As expected, results regarding both research questions discussed above also correspond with one another. For example, if physical presence of others makes emotions stronger, emotional experience is flatter in the absence of it. Thus, it makes sense that some students do not feel more positive nor negative emotions in distance learning than in contact learning. Physical learning space and physical presence of others are likely to be factors that explain the different types of emotions in the settings. Joy, focus, and nervousness when speaking in the foreign language are heightened in the presence of others and in settings that are associated with learning. Conversely, boredom and relaxation are heightened in the absence of others and in settings that are associated with relaxation, such as students' homes.

The final research question: *What emotional differences do language students perceive in giving a presentation in contact and distance learning settings?* was included in this study because presentations are among the few exercises that are most often repeated in higher education classes, and thus enable means for comparisons between the two settings. The results indicate that large majority of students feel more nervous when giving presentations, and more anxious before them in contact learning. Not as many, but still most, students agreed that presentation giving is also easier in distance learning.

On the other hand, most students also disagreed about feeling more feelings of success in distance learning settings. Thus, positive emotions may also be less strong during and after presentations. This can be detrimental from the standpoint of building confidence, as positive learning experiences shape students' future appraisals and learning related emotions. The reasons behind these results were reflected by the students in the open-ended question part of the questionnaire. These reasons were, again, similar as in other cases in this study. Students mostly feel more nervous and anxious because there are others physically present, and because they can see others looking at them. Distance learning also enables students to use assisting materials, such as notes, without others seeing this happening. To conclude, students feel more anxious before and more nervous during presentations in distance learning than in contact learning, and others' physical presence is reported as the main reason.

Overall, the results of this study showed that distance learning and contact learning differ a lot from an emotional standpoint. For most students, contact learning provides a more enjoyable and more exciting learning experience, where it is easier to focus. On the other hand, distance learning has many practical benefits over contact learning, because students can take part from almost anywhere. While distance learning can sometimes be more negative than contact learning, the lack of others presence can also cause a more flattened emotional learning experience. There can be benefits to this, as feelings of apprehension are also reduced. Thus, speaking in the foreign language or giving presentations can be easier in distance learning settings. Also, a noteworthy result was that around a half of students disagree with liking distance learning more, leaving the other half undecided or liking distance learning more. Thus, at least half of the students participating in this study may not be against using distance learning as an option alongside contact learning in the future.

While the aim of this study was to look at emotions in the contact and distance learning setting quite comprehensively, it was not possible to take all factors that affect the human emotional experience into account. Whilst different studies could be designed to have a better understanding of the more specific factors, the inherent problem in studying emotions is how well the participants can distinguish emotions and the factors that they associate with them. Cultural factors, such as different views on emotions and completely different emotional lexicons of different languages can make it difficult to extend any findings into other contexts.

The current study included some limitations, and thus some results may not represent the themes accurately. Firstly, some answers were missing from the data. The answers of the participants who failed to answer all questions were not deleted, because this happened in many questions and it was not the shortcoming of any individual student, but many. Thus, a lot of data would have been lost if all answers with missing answers were deleted. However, the type of analysis used in this study did not require all questions to have the same number of answers, as each statement and

the percentages of agreement were analyzed individually. Thus, the missing answers had very slight effects on the results of the analysis.

The questionnaire that was used for this study did provide useful and interesting results, but it included many limitations. Changes to existing and/or additional statements would have provided much better and thorough results. Statements regarding overall valence of emotions in contact learning would have been especially useful, as it is still unclear whether or not there are stronger, more positive, more negative, or more emotions altogether in contact learning than in distance learning.

As the studies in the field are still limited, further studies are needed in many fronts. The current study has shown that there are both positives and negatives to distance learning. Thus, it would be useful to investigate the ways in which distance and contact learning could be used in tandem to reach the best outcomes. Furthermore, special focus should be put on the factors that differentiate distance and contact learning on cognitive and psychological levels, so that possible changes to teaching and learning in the future could be made while maintaining students' well-being. One of these factors are emotions, which need to be studied more thoroughly across the field.

REFERENCES

- Bower, G. H. (1981). Mood and memory. *American psychologist*, 36(2), 129.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Cohn, M. A., & Fredrickson, B. L. (2006). Beyond the moment, beyond the self: Shared ground between selective investment theory and the broaden-and-build theory of positive emotions. *Psychological Inquiry*, 17(1), 39-44.
- Derks, D., Fischer, A. H., & Bos, A. E. (2008). The role of emotion in computer-mediated communication: A review. *Computers in human behavior*, 24(3), 766-785.
- Dewaele, J. M. (2007). The effect of multilingualism, sociobiographical, and situational factors on communicative anxiety and foreign language anxiety of mature language learners. *International Journal of Bilingualism*, 11(4), 391-409.
- Dewaele, J. M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in second language learning and teaching*, 4(2), 237-274.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford University Press.
- Ekman, P. & Davidson, R. J. (1994). *The nature of emotion: Fundamental questions*. Oxford University Press.
- Fayombo, G. (2010). The relationship between personality traits and psychological resilience among the Caribbean adolescents.
- Fiedler, K., & Beier, S. (2014). Affect and cognitive processes in educational contexts. *International handbook of emotions in education*. Routledge.
- Fredrickson, B. L. (2013). Positive emotions broaden and build. In *Advances in experimental social psychology* (Vol. 47, pp. 1-53). Academic Press.
- Gross, J. J. (2010). The future's so bright, I gotta wear shades. *Emotion Review*, 2(3), 212-216.

Gross, J. J. (Ed.). (2013). *Handbook of emotion regulation*. Guilford publications.

Khajavy, G. H., MacIntyre, P. D., & Barabadi, E. (2018). Role of the emotions and classroom environment in willingness to communicate: Applying doubly latent multilevel analysis in second language acquisition research. *Studies in Second Language Acquisition*, 40(3), 605-624

Levenson, R. W. (1994). Human emotion: A functional view. *The nature of emotion: Fundamental questions*, 1, 123-126.

Levenson, R. W. (1994). The search for autonomic specificity. *The nature of emotion*, 252-257.

Linnenbrink-Garcia, L., & Barger, M. M. (2014). Achievement goals and emotions. In *International handbook of emotions in education* (pp. 152-171). Routledge. .

Lisnychenko, A., Dovhaliuk, T., Khamska, N., & Glazunova, T. (2020). Foreign language anxiety: Classroom vs distance learning.

MacIntyre, P. D. (2007). Willingness to communicate in the second language: Understanding the decision to speak as a volitional process. *The modern language journal*, 91(4), 564-576.

MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language learning*, 44(2), 283-305.

MacIntyre, P., & Gregersen, T. (2012). Affect: The role of language anxiety and other emotions in language learning. In *Psychology for language learning* (pp. 103-118). Palgrave Macmillan, London.

MacIntyre, P., & Gregersen, T. (2012). Emotions that facilitate language learning: The positive-broadening power of the imagination.

Manstead, Antony SR, Martin Lea, and Jeannine Goh. "Facing the future: Emotion communication and the presence of others in the age of video-mediated communication." *Face-to-face communication over the internet: Issues, research, challenges* (2011): 144-175.

Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). e-Learning, online learning, and distance learning environments: Are they the same?. *The Internet and higher education*, 14(2), 129-135.

Pavlenko, A. (2008). Emotion and emotion-laden words in the bilingual lexicon. *Bilingualism: Language and cognition*, 11(2), 147-164.

Pekrun, R. (2006). The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educational psychology review*, 18(4), 315-341.

Pekrun, R. (2017). Emotion and achievement during adolescence. *Child Development Perspectives*, 11(3), 215-221.

Pekrun, R. & Linnenbrink-Garcia, L. (2014). *International handbook of emotions in education*. Routledge.

Pekrun, R., & Perry, R. P. (2014). Control-value theory of achievement emotions. In *International handbook of emotions in education* (pp. 130-151). Routledge.

Pekrun, R., Goetz, T., Daniels, L. M., Stupnisky, R. H., & Perry, R. P. (2010). Boredom in achievement settings: Exploring control-value antecedents and performance outcomes of a neglected emotion. *Journal of educational psychology*, 102(3), 531.

Posner, J., Russell, J. A., & Peterson, B. S. (2005). The circumplex model of affect: An integrative approach to affective neuroscience, cognitive development, and psychopathology. *Development and psychopathology*, 17(3), 715-734.

Prinz, J. (2012). Emotion. In K. Frankish & W. Ramsey (Eds.), *The Cambridge Handbook of Cognitive Science*. Cambridge: Cambridge University Press. doi:10.1017/CBO9781139033916.013.

Russell, J. A. (1980). A circumplex model of affect. *Journal of personality and social psychology*, 39(6), 1161.

Sadeghi, M. (2019). A shift from classroom to distance learning: advantages and limitations. *International Journal of Research in English Education*, 4(1), 80-88.

Scherer, K. R. (2000). Psychological models of emotion. *The neuropsychology of emotion*, 137(3), 137-162.

Shuman, V., & Scherer, K. R. (2014). Concepts and structures of emotions. *International handbook of emotions in education*, 23-45.

Stephan, M., Markus, S., & Gläser-Zikuda, M. (2019, October). Students' achievement emotions and online learning in teacher education. In *Frontiers in Education* (Vol. 4, p. 109). Frontiers.

Storbeck, Justin, and Gerald L. Clore. "On the interdependence of cognition and emotion." *Cognition and Emotion* 21.6 (2007): 1212-1237.

The Cambridge Handbook of Cognitive Science.

Tsiplakides, I., & Keramida, A. (2009). Helping students overcome foreign language speaking anxiety in the English classroom: theoretical issues and practical recommendations. *International Education Studies*, 2(4), 39-44.

Verduyn, P., & Brans, K. (2012). The relationship between extraversion, neuroticism and aspects of trait affect. *Personality and Individual Differences*, 52(6), 664-

Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American psychologist*, 35(2), 151.

APPENDIX

LIKERT-TYYLISET KYSYMYKSET - 1: TÄYSIN ERI MIELTÄ - 5: TÄYSIN SAMAA MIELTÄ:

1. Vieraalla kielellä puhuminen hermostuttaa minua enemmän etäopetuksessa kuin lähiopetuksessa.
2. Koen vähemmän ahdistuneisuutta etäopetuksessa kuin lähiopetuksessa.
3. Tunnen enemmän negatiivisia tunteita etäopetuksessa kuin lähiopetuksessa.
4. Tylsistyn helpommin lähiopetuksessa kuin etäopetuksessa.
5. Nautin enemmän etäopetuksesta kuin lähiopetuksesta.
6. Koen enemmän iloa lähiopetuksessa kuin etäopetuksessa.
7. Tunnen enemmän positiivisia tunteita etäopetuksessa kuin lähiopetuksessa.
8. Koen oloni rentoutuneemmaksi etäopetuksessa kuin lähiopetuksessa.
9. Jos onnistun etäopetustilanteessa, onnistumisen kokemukseni on voimakkaampi kuin lähiopetustilanteessa.
10. Pidän enemmän etäopetuksesta kuin lähiopetuksesta.
11. Tunnen voimakkaampia tunteita etäopetuksessa kuin lähiopetuksessa.
12. Koen erilaisia tunteita etäopetuksessa kuin lähiopetuksessa.
13. Lähiopetukseen on helpompi keskittyä kuin etäopetukseen.
14. Muiden fyysinen läsnäolo vahvistaa kokemiani tunteita.
15. Muiden fyysinen läsnäolo nopeuttaa tunteideni ilmaantumista.
16. Opiskelu fyysisessä luentosalissa tekee oppimiskokemuksestani innostavamman.
17. Opiskelu fyysisessä luentosalissa tekee oppimiskokemuksestani negatiivisemmän.
18. Esitelmän pitäminen on helpompaa etäopetuksessa kuin lähiopetuksessa.
19. Esitelmää pitäessäni minua hermostuttaa enemmän etäopetuksessa kuin lähiopetuksessa.
20. Esitelmän pitäminen jännittää etukäteen enemmän lähiopetuksessa kuin etäopetuksessa.

AVOIMET KYSYMYKSET:

1. Missä luennoilla tapahtuneissa tilanteissa koet tyypillisesti oppimiseen liittyviä tunteita? (esim. ahdistuneisuus, ilo, nautinto, onnistuminen, pelko)
2. Onko kokemuksesi edellisen kysymyksen tilanteissa erilainen etä- kuin lähiopetuksessa? Millä tavoin ja mistä koet tämän johtuvan?
3. Mitkä tekijät ovat vaikuttaneet positiivisesti tai negatiivisesti kokemukseesi etäopetuksesta? (esim. tapa suorittaa kurseja tai muut taustatekijät)