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PLAY AND MOTIVATION: THROUGH THE EYES OF MONTESSORI,
VYGOTSKY, DECI & RYAN

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This thesis covers play and motivation as separate entities, and then discusses them together. First goal was to explore if there is a connection between play and motivation and how do Montessori, Vygotsky, Deci and Ryan explore these in their own theories. First Vygotsky’s ideas are presented, then Montessori is explored and after this, these two theories are brought together and looked at especially in the context of playing. Afterwards The Self-Determination Theory of Deci and Ryan is analyzed through motivation. Finally, based on these theories, both play and motivation are discussed while backanalyzing personal experiences.

This thesis uses literature review as a guide for exploring material. In addition to primary sources written by the authors themselves, sources that are most up to date were given preference. They were compared and contrasted through summary of the key ideas, and synthesized though my own analysis.

Based on this thesis, play and motivation are indeed linked and there are many connections among the analyzed theories. This research process was a useful experience for me, as it connected theory and practice. In that sense, it might be useful for others. The thesis might be also interesting and inspiring for those who look for a playful way of getting familiar with some core ideas about play and motivation in education.

Asiasanat/Keywords: Deci, Montessori, Motivation, Play, Ryan, Self-Determination Theory, Vygotsky.
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1  3... 2... 1... Go! Introduction

Once upon a time in a land far far away, there was born a little girl. She grew up happily playing with her brothers, cousins and friends. She used to spend a great amount of time outdoors, playing tag, riding bicycles, and climbing trees. She also liked to play indoors building fortresses and creating a life for her Bratz dolls. Her parents often read to her and her brothers before they went to sleep. She was also active through playing different sports and yard games. She was a happy little girl. Later on, she grew up and became a big girl, she continued to play different musical instruments, and instead of creating a life for her Bratz dolls, she played a role herself through plays and musicals. She was still active with sports and she tried numerous different ones. She enjoyed life.

Even later on in life, she still enjoyed playing, but now she wanted to research and write about playing. She did some research and found out that other people find playing important as well.

Slade (1995) differentiates between two types of play: Projected Play and Personal Play. He describes Projected Play as play in which the player is still, but they rather project their playing to objects around them (p. 2). Personal Play on the other hand uses the body and its movement to play, for example: dancing, running and active sports fall under this category (p. 3). Moyles (1989) divides play in school into three different categories: physical, intellectual and social/emotional play (p. 12 - 13). Physical play includes for example dance and building blocks, intellectual play includes telling stories and painting, and social/emotional play includes pets and music (p. 12 - 13). No matter how one defines play though, it is clear that play is important to all humans. Moyles (1989) even mentions how being concentrated on the definition of play as something non-serious is harmful and the concept of play should be changed (p. 16). Furthermore, Slade (1995) discusses the importance of finding your inner child again as an adult (p. 316). This is something I disagree with, playing and being a child, should never disappear and it is naturally a part of you as an adult. I believe, like Larsen (2010), that it is important for everyone to “get out of life” and enjoy (p. 187). Regardless of the definition of play, playing is important for every human being, both children and adults.

“Other people seem to agree with me on this one,” she thought.

Therefore, she started writing about this phenomenon called play and this is the result.
1.1 3! Why?

“[P]leasure in learning is one of the transcendent experiences of human life, one that offers meaning and a sense of connection in ways that few other activities can” (Olson, 2009, p. 30-31).

Olson (2009) discusses the phenomenon of losing the joy in education, even though it is one of the most important aspects of learning, at least based on my own experiences, furthermore Olson (2009) describes it as central to human happiness (p. 31). Ryan and Deci (2009) also echo that recently schools are losing the joy in education and this has rather been replaced by standardized testing with high pressure. Olson (2009) furthers this idea by stating that actually, pleasure in learning is essential (p. 34). In my opinion, at least learning is more useful and more fulfilling with pleasure in it. This quotation and these thoughts about it made me realize I chose the correct topic for my Bachelor’s thesis. Personally, I value receiving comments about my happiness and smiling when I teach. I believe in the joy of learning and I want to pass this onto students and people I meet in general. I wish every student would have a sense of lifelong learning and I wish every student enjoys learning. One does not have to enjoy everything they learn, but hopefully everyone would find something they are passionate about learning. These are some of the thoughts I wanted to explore, and how can fun and enjoyment be beneficial to learning, specifically when exploring motivation.

I was reading through material for the Physical Education minor. The material covers methods and the theoretical ideas of how to teach physical education to children of different ages. Sääkslahti et al. (2012) mention the idea of being playful and how this is important for children and how this can be beneficial when teaching physical education (p. 16). Sääkslahti et al. (2012) continue the book with different sports and ways to teach them in the elementary school. The ones that I have looked at mention different games to develop the physical education skills, for example a space tag game to cover the basics of jumping (p. 28) and a train relay game for ice skating (p. 128). I as well, found the idea of games while reading about how to teach swimming, Keskinen et al. (2011) include games in their lesson plan model (p. 85). I also received material for an elective course about coaching track and field at the high school level, and even at this level fun was still emphasized (Amneus et al., 2012, p. 10 - 11). These are broader instances in which I noticed the presence of games and the idea of fun in learning.
I also came across the idea of play and its importance in the course on inclusive education, where we got familiar with the UNESCO Education for All 2007 report on early childhood education. After reading this, I understood early childhood education more and I was more aware of the importance of play in childhood. Also, Slade (1995) describes nursery schools and play centers as the first steps away from home, the building of new relationships and other important aspects (p. 47). I realize the importance of early childhood education. This importance is recently recognized by governments as well (Isaacs, 2012, p. 98). This was emphasized in the Education for All goals commissioned by UNESCO. The 2007 report concentrated specifically on early childhood care and education. UNESCO (2006) discusses the importance of early childhood education due to the potential of young children and the development before children begin school (p. 12). In this report UNESCO (2006) defines the goals of early childhood care and education holistically, the one that this thesis will tackle is “creating a safe environment for young children to play and socialize with their peers” (p. 15). I want to explore the idea of the natural way of learning of playing used also in the formal institutions of day care centers. I decided to limit myself to mainly day care centers to have a clearer focus.

Not only my own university studies, but also recent news furthered my passion for the topic of playing. I value the idea of playing and the fun in education and being a child. In recent years though, I have noticed a trend that there is less playing and less fun among children. According to, Mannerheimin Lastensuojeluliitto, [Mannerheim League for Child Welfare] (2009), children are in a hurry to become independent and leave the home, even though children would benefit from having a long and a non-rushed childhood. Helle (2014) had received a question from a 12-year old girl on his blog about how the girl’s friends were not playing with her anymore, but instead were talking about makeup. This is a phenomenon that both children and adults are noticing. I personally remember playing outside and with Bratz dolls well into my teens, and I still do not wear makeup on a daily basis. Based on these and other experience, I feel that today’s children are in a hurry to grow up and therefore play is even more important than it used to be.

I believe, though that playing is an important part of childhood. As a future teacher, I want to emphasize on the importance of playing and enjoying learning and ideally through this encourage lifelong learning. These findings and thoughts caused me to use the opportunity of my thesis to research what has educational theorists determined about play and motivation.
1.2 2! What?

1.2.1 Research Questions

What is the potential of games/playing for increasing students’ motivation and how can they be incorporated into classrooms?

This is the main research question for the thesis. It is broken into multiple parts to give it clarity. First of all, I just want to explore the idea of motivation and games being linked together, I want to see if a correlation can be found between these two. The next part is the practical aspect of the question, if they are linked to each other in a positive correlation, then how can they benefit from each other in the classroom. I want to provide practical tips and games which teachers can use in their classrooms. The last part will explore more theoretical ideas of should games be included in the classroom or not.

To give focus to this rather broad question that would fit the scope of the bachelor’s thesis, I decided to explore closely Vygotsky and Montessori to explore further with playing, and then I decided to research Ryan’s and Deci’s theory of Self-Determination to understand motivation better than before. I started from the global perspective of placing these theories in a general context, and from there I zoomed into my own personal experiences, but for the sake of the theory I did not have a specific geographical focus.

1.2.2 Hypotheses

My hypothesis is that: yes, games and playing in general, can add motivation. Initially I believe that games can add more to external motivation, but throughout my research I would like to explore also the idea of how games can add to internal motivation through the joy of learning.

I know there are ways to add games to classrooms, I have done this in the past myself, but how can they be added in the most effective way possible. The last part of my research question, I would like to explore also the cons of adding games to education. It might also be important for children to learn to do tasks they do not enjoy doing.

These were my initial hypotheses, like I mentioned later, I shifted my focus to explore more deeply at Vygotsky and Montessori, and the Self-Determination Theory. I still kept
these questions and hypotheses, but I did not focus on them in great detail. I rather explored the idea through the perspective of Vygotsky, Montessori and Ryan and Deci. This is explained in detail in the next part.

1.3 1! How?

I decided to do my thesis based on the idea of a literature review. I wanted to study as much material as possible, since I do not have extensive knowledge of the topic from a theoretical background.

I chose my initial material based on the available material at University of Oulu library. I searched for the material using keywords such as “motivation,” “games,” “play,” “playing,” and “early childhood education.” I also searched for combination of these words. A few books I chose were from my course material for the physical education minor. I as well found a few books accidentally, saw an interesting title on the library shelf, for example. I preferred more recent materials. I used physical books rather than electronic books, due to personal preference. I preferred if possible, material written by the theorists themselves, but this proved to be difficult. This was for the initial reading on my thesis.

I wanted to then narrow my focus only to a few theories, since I believe at university I have received general overall knowledge about many theories and theorists only. I wanted to use this chance to develop a deeper understanding of only some of the theories. I was interested in studying the theories of Piaget, Vygotsky, Steiner and Montessori. I chose the books based on trying to find introductions to their theories. I wanted to research child development theories and to connect these to playing and motivation. I chose Piaget and Vygotsky since they are the main theorists we have discussed during our university courses. I chose Vygotsky rather than Piaget to study further, since Vygotsky valued play as a learning experience compared to Piaget who found play as useless for learning after a certain phase of development (Pass, 2004, p. 114-115). I as well decided to study Steiner and Montessori in the beginning, since they were also theorists that I remember from my courses. I chose Montessori rather than Steiner, since I was interested in how she incorporates play into her idea of childhood. Pass (2004) mentions Montessori and Vygotsky discussed the importance of play together (p. 115). Furthermore, a friend of mine shared with me her experience of going to a Montessori day care center, and this sounded interesting. Based on these initial readings my focus became Vygotsky and Montessori.
I decided to do a similar approach to the motivation part of my thesis. I decided to further develop my understanding of the Self Determination Theory by Ryan and Deci. I have heard about this theory briefly mentioned in a few classes and workshops, but I wanted to understand it better. I believe, it also fits into the idea of games and fun.

When choosing material for my theorists of Vygotsky, Montessori, Ryan and Deci, I used the same principles as previously of using material available at the University of Oulu library and when possible I chose material written by the theorists themselves, and I mostly used physical copies of books. As search words, I used the theorists’ names and especially for Ryan and Deci I used “Self-Determination Theory” as a search word and I connected these to “play.”

Now, being done with the explanation of the research, it is time for a treasure hunt through Montessori, Vygotsky, Deci and Ryan. Remember to have fun!

Figure 1: Lap of Fun

1.4 Go!
2 Lap 1: Playing

“One of the great gifts of life is to know how to play. When we are young, most of us know how to do this. As we get older, something of the joy dies and so-called reality sets our course to things more grim. Yet a small fire may glow on, deep inside, and occasionally flicker up. In a moment we are younger again, we laugh and the world looks brighter” (Slade, 1995, p. 2).

2.1 Vygotsky

2.1.1 Fun Facts

- Vygotsky enjoyed the verbal arts of literature, poetry, theater and philosophy from an early age (Berk & Winsler, 1995, p. 1).
- According to, Berk and Winsler (1995) Vygotsky was literate in eight languages: Russian, German, English, Hebrew, French, Latin, Greek, and Esperanto (p. 2).
- According to, Tudge and Scrimsher (2003) some of Vygotsky’s writings have been wrongly translated (p. 211).
- Vygotsky was admitted to Moscow University by a lottery (Berk & Winsler, 1995, p. 2).
- Vygotsky and Piaget were born in the same year of 1896 (Pass, 2004, p. 1).
- Vygotsky wrote a major work about Hamlet (Tudge & Scrimsher, 2003, p. 208).

2.1.2 Main Concepts

According to, Berk and Winsler (1995), Vygotsky emphasized teachers to concentrate on children’s strengths rather than their weaknesses (p. 8). Along with this according to Berk and Winsler (1995), play is the most important education activity of early childhood (p. 57). This I agree with, I believe my positive experience as a child is due to the fact that I spent a great amount of time playing alone and with others, and explored the world through this. Vygotsky did also believe that children have at least some natural curiosity to learn, and the teaching should be based on this (Holbrook, 2003, p. 122).

According to, Tudge and Scrimsher (2003) Vygotsky’s theories were based on the connection of the individual, the interpersonal and the cultural-historical aspects (p. 208). Based on this Vygotsky’s theories are dialectical in nature with social phenomena and individual
characteristics affecting the development of a child (Tudge & Scrimsher, 2003, p. 222). Some of the major aspects he studied within this dialectical approach were language, social interaction and culture (Tudge & Scrimsher, 2003, p. 209). Furthermore, Berk and Winsler describe Vygotsky’s theory as a dance, describing the relationship of the adult and the child as the child leading and the adult “in tune” with the child’s actions (Berk & Winsler, 1995, p. x). Vygotsky’s theory is referred to a “socio-cultural” theory since it specifically explores how does social and cultural influences affect a child’s development (Berk & Winsler, 1995, p. 4).

2.1.3 Vygotsky’s Child Development

Holbrook (2003) states that Vygotsky used the term critical periods to guide his timeline to child development. According to Vygotsky, these critical periods often caused crises within the child and these were the times that a child would change the most (as cited in Holbrook, 2003, p. 119, p. 122). According to Holbrook (2003), these critical periods do not occur at the same time and do not last the same time in each child. Furthermore, Holbrook (2003) states that according to Vygotsky these periods affect both the child’s internal and external life and the child’s relation to their environment (as cited in Holbrook, 2003, p. 123). According to Vygotsky the critical periods happen at approximately the following ages: the first one is at birth, then a one-year old separates infancy from early childhood, a three-year old moves from early childhood to preschool age, at age seven a child moves from preschool age to school age and finally a thirteen year-old moves into puberty causing a crisis (as cited in Holbrook, 2003, p. 124). During the second period from a one-year old to a three-year old, the child is concerned with the objective environment, at the age of three the child becomes more aware of the subjective environment and the relationship to others, and also during this period the child wants to become more independent compared to having to depend on others in the previous periods (Holbrook, 2003, p. 130 - 131). The next period is marked by the start of school, and an important phase in this period is learning how to read and write and this can be frustrating for children, especially if it is not taught well (Holbrook, 2003, p. 132). According to Vygotsky states in Holbrook (2003), at age 13, children start forming concepts about the world and connecting aspects together, instead of strictly following a system of schooling. Furthermore, according to Vygotsky, this thinking is considered to be more qualitative and in a higher form than the previous stage (as cited in Holbrook, 2003, p. 132 - 133).
In general, these periods, according to Vygotsky, have some common characteristics: the periods do not have clearly defined boundaries of duration, also the rate of development slows down during these critical periods, but lastly the child gains a new level of development, even though the child might lose some of what they acquired earlier (as cited in Holbrook, 2003, p. 124). Also in general these periods are affected by cultural norms, like school starting age, rather than physiological maturation (Holbrook, 2003, p. 125).

2.1.4 Zone of Proximal Development

According to Schaffer, Vygotsky emphasized the importance of social interaction with adults and peers, especially in terms of the Zone of Proximal Development, an outsider is needed to guide the child to the next level of development (as cited in Daniels, 1996, p. 271). This is contrasting from Piaget and Montessori who emphasize more the physical world and the objects in them, rather than the social aspect (as cited in Daniels, 1996, p. 271; Gutek, 2003, p. 184).

According to Tudge and Scrimsher (2003), the Zone of Proximal Development has been focused on, sometimes at the expense of the connection of the individual, interpersonal and cultural-historical factors (p. 211). According to Vygotsky the Zone of Proximal Development occurs when an adult or a peer help a child to reach a more difficult task or concept (as cited in Hedegaard, 1990, p. 172). According to Tudge and Scrimsher (2003), this idea should not ignore the individuality of the child or the history and culture of the child. Vygotsky argues that the Zone of Proximal Development measures the level of actual intellect better than standardized testing (Tudge & Scrimsher, 2003, p. 211). The zone is the level of difficulty that the child cannot do on their own, but just need guidance to accomplish. Therefore, social interaction is key in the Zone of Proximal Development and it is necessary for successful completion. In order for the use of the Zone of Proximal Development in the classroom the teacher has to be aware of the development stages of children, it is also important to find the similarities in the students if a teacher wants to use the Zone of Proximal Development with the whole class (Hedegaard, 1990, p. 182).

Vygotsky connected play to his theory of the Zone of Proximal Development. He and later researchers based on his work suggested that play is important and it advances children in themselves (Berk & Winsler, 1995, p. 52). According to Vygotsky play itself creates a Zone of Proximal Development since in play children behave above their age and above
their daily behavior (as cited in Tudge & Scrimsher, 2003, p. 214). Therefore the Zone of Proximal Development is an important aspect of playing and playing itself is an example of the Zone of Proximal Development.

2.1.5 Play Through Vygotsky’s Eyes

Vygotsky himself wrote very little about play directly, only 12 pages, but he was ahead of his time when writing about play according to Berk and Winsler (1995, p. 52). Vygotsky did value play, even though he wrote little about it, he also connected it to being beneficial to child development (Berk & Winsler, 1995, p. 79). According to Berk and Winsler (1995), Vygotsky described especially fantasy play as a leading factor in development (p. 52). According to Vygotsky play provides a source of a Zone of Proximal Development since the child is expanding his skills (as cited in Berk & Winsler, 1995, p. 52). Berk and Winsler (1995) state that Vygotsky suggested two main features of play: that play creates an imaginary situation and that play contains rules for behavior. Berk and Winsler (1995) continue that Vygotsky theorized that children play in order to “postpone the gratification of impulses,” since as toddlers children are introduced to rules of society and the family, for example to stay away from hot stoves and to not take toys from others (as cited in Berk & Winsler, 1995, p. 53 - 54). This seems logical, this seems to be the time that children learn to talk and understand more, therefore it becomes the time for parents to set rules. Vygotsky also states that the imaginary play has certain rules, children tend to follow the rules of the family/society in their fantasy play as well, for example following the routines of going to sleep the same way as in the home (Berk & Winsler, 1995, p. 54).

Based on these two features of play, specifically imaginative play, Vygotsky claims that this promotes development since it develops “the ability to separate thought from actions and objects” and “the capacity to renounce impulsive action in favor of deliberate and flexible self-regulatory activity” (as cited in Berk & Winsler, 1995, p. 54). Vygotsky suggested that imaginative play detaches the word for a telephone from an actual telephone since a toy telephone can be used to pretend to call someone, this is taken further when the child is about two or three years old and they can use another object or completely pretend to call someone by just dialling the number in their hand (Berk & Winsler, 1995, p. 55). Playing as children, can lead adults to be more creative using abstract and imaginative thinking (Berk & Winsler, 1995, p. 55). I believe at least it would not be harmful to adults. Larsen
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(2010) discusses the importance of creative imaginations to transcend strict patterns and rules in the adult age (p. 188). This is what Vygotsky himself did, by bringing creative thoughts to child development and psychology, possibly Berk and Winsler (1995) claim, because he came to the field with no formal education and as an outsider (p. 3). Vygotsky describes fantasy play as a paradox, since it seems to outsider as the children are doing what they like, but there is a certain set of rules to be followed, the degree of rules depends on if it is a game or purely imaginative (as cited in Berk & Winsler, 1995, p. 56). According to Berk and Winsler (1995), Vygotsky describes an example of this with a piece of candy in play, which the child cannot actually eat since the piece of candy does not exist; this constitutes as “maximum display of willpower.” This self-control then in turn helps children understand society, for example from the role of a parent (as cited in Berk & Winsler, 1995, p. 56). According to Berk and Winsler (1995), Vygotsky states that playing as a child also helps later on to become more goal-oriented with games changing to ones with more rules, for example board games and sports, children are just unaware that they are following some rules already as toddlers (p. 56 - 57). This in general, I find interesting since usually free and imaginative play is thought of as “anything goes,” but this is indeed not the case. Often children are seen excluding someone from playing, because they are not following the rules. One of the greatest complaints in my coaching has been debates about if someone is out or not, for example when touched by the ball. These types of games have more defined rules, and the idea of following rules is emphasized. Play indeed, seems to be meaningful to children and Vygotsky at least sees it as developing important skills and it being the most important educational tool in the early years.

2.2 Montessori

2.2.1 Fun Facts

- The Montessori Method “sold out a first edition of 5,000 copies in four days in April, 1912” (Montessori, 1965, p. 9)
- Montessori was influenced by Froebel (Montessori, 1965, p. 11) and the Finnish children’s band “Fröbeling Palikat” is named after Froebel (Rumba-Ali, n.d., historia)
- According to Isaacs (2012) there are over 16,000 Montessori schools internationally (p. 2).
Montessori was the only woman in her program at the University of Rome School of Medicine (Isaacs, 2012, p. 6). She was also the first Italian woman to receive the Doctorate of Medicine (Gutek, 2003, p. 173).

Montessori was one of the founding members of UNESCO (Isaacs, 2012, p. 12).

2.2.2 Main Concepts

“When, in darkness and in silence, their spirit left free to expand, their intellectual energy redoubled, they become able to read and write without having learnt, almost is it were by intuition, they, only they, can understand in part the ecstasy which God granted you on the luminous path of learning” (Montessori, 1965, p. 26).

This quotation from Montessori herself, describes her view on children and education. Here, Montessori is discussing Helen Keller and her educator and how Helen could learn even though at first it seemed impossible. When the child is freed and seen as an individual, they can learn and often they do not even realize they are learning, much like my friend S. Korpiharju who just realized that she had learned to read and write and was bored in first grade because of this (personal communication, February 12, 2017). Montessori’s aim was to help individual children to reach their full potential (Isaacs, 2012, p. 9). This can be seen in her method of promoting freedom and self-exploration and the individuality of the child (Isaacs, 2012, p. 102). The teacher should trust the child to make decisions without much interference (Isaacs, 2012, p. 102). Moreover, Montessori’s approach had four main principles: first, each child is an individual with special interests, secondly, all children are capable of absorbing information from their environment and they want to do this, third, the first six years of a child’s life is crucial for learning, both consciously and unconsciously, and fourth, children need and want to work on different tasks (Gutek, 2003, p. 178).

Montessori (1965) divides the work of children to two categories: the motor functions of learning how to walk and move and the sensory functions of receiving and gathering information about the environment to become intelligent (p. 34 - 35). Another part of Montessori’s (1965) method is to develop language (p. 50). The layout and the materials in the Children’s House provide most of the development for the motor functions, but Montessori (1965) created specific objects to develop sensory functions and language (p. 50). For the scope of this thesis, I will not discuss these further, but Montessori spent time designing specific blocks and geometric shapes to be included in the Montessori Approach (1965, p. 65 - 123). Montessori (1965) also designed and used specific objects for the teaching of
language, arithmetic and music skills (p. 140 - 182). The main reason why these objects should be available to children was that they could play with them and learn from their own mistakes by repetition, rather than being told what to do by an adult (Gutek, 2003, p. 178). Also, it was important that each environment had just one set of each Montessori’s didactic object, since this way children could also learn about social aspects like turn-taking and patience (Gutek, 2003, p. 184). I will explain the idea of the Children’s House in further detail in a later section.

The main aspect is that the want to learn and explore these items should come from the child themselves. Montessori (1965) emphasizes how children should be able to move as much as possible, without being controlled by an adult, this is how children develop their motor skills (p. 53). I find this most valuable. I believe in the importance of physical activity at all levels, but especially as a young child physical activities like recess time and free play provide much needed breaks from the demands of mental activity at school and it can even enhance mental capabilities by providing blood flow to the brain (Tomporowski, McCullick, Pesce, 2015, p. 27). The idea of physical activity being important to children dates back to Plato (Tomporowski et al., 2015, p. 24). In these days, in my opinion parents and teachers are too worried about letting the children fall and be hurt. Falling and getting back up again is a large part of learning, like Albert Einstein said “if you've never failed you've never tried anything new.”

2.2.3 Montessori’s Child Development

Montessori emphasized the importance of the first three years of life as more important than the rest of the years combined (as cited in Isaacs, 2012, p. 18). Montessori divided children’s development into three six-year periods (as cited in Isaacs, 2012, p. 18). According to Montessori, the first period is called the absorbent mind and this starts already in the womb and continues to the age of six (as cited in Isaacs, 2012, p. 19). Montessori decided to call this stage the absorbent mind since this is the period where children absorb information effortlessly, and this does not happen again in the later stages of development (as cited in Isaacs, 2012, p. 19). This stage is characterized by the child learning the most about order, movement, small detail, language, refinement of the senses and social aspects, it is crucial for these features to develop during this period otherwise they might be lost (Isaacs, 2012, p. 20). The absorbent mind stage is further divided into two: the unconscious
absorbent mind and followed by that after about three years the conscious absorbent mind (Isaacs, 2012, p. 20, 24). According to Montessori, the unconscious absorbent mind period is characterized by the importance of independence and it unfolds the human potential in the child (as cited in Isaacs, 2012, p. 20). According to Montessori, at the following stage of conscious absorbent mind stage the child becomes aware of the social aspects of life like character and society (as cited in Isaacs, 2012, p. 24). She called these crucial periods sensitive periods, when the child is more susceptible to a certain part of development (Gutek, 2003, p. 174).

Furthermore Montessori continues with childhood from the age of six to twelve, and this stage is characterized by acquisition of culture and morality (Isaacs, 2012, p. 26). This stage is also subdivided into two three-year periods, but Montessori does not describe these in detail (Isaacs, 2012, p. 27). After this is the adolescence stage from the age of twelve to eighteen. This stage according to Montessori is characterized by its volatile nature and requires a caring and an understanding adult (as cited in Isaacs, 2012, p. 27). This stage is divided into the first three years of puberty, where the volatile nature especially emerges, and after puberty there is the young adulthood (Isaacs, 2012, p. 27). Bradley et al. (2011), according to Montessori, add to this the early adulthood stage between the ages of 18 and 24 (p. 75). This stage is characterized by a calm expansion of the previous stage, Montessori did not spend much writing on this phase (Bradley et al., 2011, p. 75). In general Montessori has designed her approach based on these periods and the aspects that the child is ready to learn at each stage (as cited in Isaacs, 2012, p. 21).

2.2.4 Children’s House

The Children’s House “Casa dei Bambini” proposed by Montessori (1965) is literally a house for children (p. 1, 37). In general, the Children’s House provides a safe environment for trying and learning through trial and error. The furniture and other equipments should be as lifelike as possible and they should be measured specifically for children, for example toy animals and little tables of different sizes (Montessori, 1965, p. 40, 44). All of the materials should be easily accessible and they should be neatly organized for ease of access. Also this environment should include outdoor and natural aspects like plants and a garden, if possible (Isaacs, 2012, p. 70 - 71).
Montessori’s self-expression area of activity includes more familiar ideas of playing like painting, musical instruments and storytelling (Bradley et al., 2011, p. 77). These activities are also the creativity (Isaacs, 2012, p. 87). These activities are located in the “club-room” of a Children’s House, the environment of the Montessori approach (Montessori, 1965, p. 37). These activities should be free activities for children to engage themselves in when they want, a concrete example is given of storytelling which should only happen when children ask the teacher to read for them (Montessori, 1965, p. 43). Montessori sees play and work as practical the same in children (Bradley et al., 2011, p. 82). The idea of the Children’s House explains how work and play are incorporated together: children enjoy and area eager to learn household tasks like washing dishes and gardening (Montessori, 1965, p. 60).

2.2.5 Play Through Montessori’s Eyes

“[The Montessori] approach develops strength of character and fosters a lifelong love of learning” (Bradley et al., 2011, p. 71).

This quotation summarizes my aim of using play in education to foster lifelong love of learning, I believe it is extremely difficult to achieve this if the students are not enjoying learning. On the contrary though Bradley et al. (2011), explain that one of Montessori’s key points about her education was that children prefer purposeful activities like work, rather than play (p. 73). This is dependent on how one defines play, to determine if it is purposeful or not. “Play [is] often called “work” in Montessori settings because it contributes to the child’s development. It is any activity spontaneously chosen by the child or a group of children which absorbs their whole being” (Isaacs, 2012, p. 112). On the other hand, “[w]ork: [is] perceived by Montessori as the totality of the child’s efforts which contribute to the formation of a mature human being” (Isaacs, 2012, p. 113). Montessori considers work to be the time when a child is working on a particular task, for example trying to master one of Montessori’s didactic materials provided (Gutek, 2003, p. 184). In the Montessori approach work and play are sometimes synonymous since the child is free to choose what they do, but the materials available are controlled, for example using the objects created by Montessori. The child has a choice, but it is pre-controlled.

Enjoying purposeful activities was a characteristic by children, but one of Montessori’s theme of education is “learning through play” (Bradley et al., 2011, p. 74). Bradley et al. (2011), further describe the Montessori approach with children being active, learning with
their senses and having concrete experiences and manipulation with the hands, regardless of its work or play (p. 76). Montessori integrates the content and the process of play, the more important aspect is the end goal of autonomy, perseverance and concentration (Bradley et al., 2011, p. 76). The want to learn comes from the children themselves, therefore it is not forced, hence it can be called play. Since the children self-explore the available activities, there is no need for external rewards as motivation since the children are self-motivated since they have freedom (Isaacs, 2012, p. 10). I did not find information on when should the adult intervene and give at least some sort of motivation, for example if the child sits around without doing anything for the whole day, is this allowed or not. According to Bradley et al. (2011), people have criticized her theories for a lack of imaginative play, since her play is concentrated on the real world (p. 82). On the contrary, this is what Vygotsky found most valuable (Berk & Winsler, 1995, p. 54). It is often said that play is child’s work and I believe this myself and Montessori seems to also agree with that. The most important aspect of being a child is playing and exploring the world, but doing this at one’s own pace is what Montessori is emphasizing on. It should not be externally mandated by an adult, but rather the motivation should come from the child themselves.

2.3 Vygotsky and Montessori Playing Together

2.3.1 Fun Facts Together

- Both Vygotsky and Montessori were inspired by children with physical and mental disabilities (Berk & Winsler, 1995, p. 5; Isaacs, 2012, p. 6).

- Vygotsky and Montessori were both minorities at university, Vygotsky was a Jew and Montessori was a woman (Berk & Winsler, 1995, p. 2; Isaacs, 2012, p. 6).

- They both lived at the same time from 1896 to 1934, totalling 38 years, this was about the life span of Vygotsky and Montessori was both born before and passed away after Vygotsky (Isaacs 2012; Berk & Winsler, 1995).

2.3.2 The Role of the Teacher

An example of the difference between Vygotsky’s and Montessori’s ideas of the teacher can be demonstrated through the idea of scaffolding. Isaacs (2012) describes the idea of
“scaffolding” in the Montessori approach (p. 53). Scaffolding is described as expanding the knowledge of the child by small manageable steps and this is repeated until the child has learned the skill (Isaacs, 2012, p. 53). Isaacs (2012) describes an example of using scissors and mastering the skill, starting with just holding the scissors developing all the way to cutting pictures out of postcards (p. 54). Here, I can imagine the teacher just cutting and with the children slowly starting to follow at their own pace. This differs from the idea of Vygotsky, who theorizes scaffolding as a part of playing for adults and older peers (Berk & Winsler, 1995, p. 78). This happens by providing certain environments or objects to play with to the younger children. The social aspect of playing is heightened. This is where the teacher becomes important.

As stated by Berk and Winsler (1995), Vygotsky emphasizes the role of the teacher in day care especially as a “caregiver” substitute, this is especially important if the caregiver has been passive at home. According to Isaacs (2012), Montessori on the other hand, referred to the teachers either as a “directress” or a “director” (p.41), this suggests more of just a guide to the child’s own development and freedom. Furthermore, Berk and Winsler (1995) continue that, Vygotsky suggests that with the help of the caregiver, the child’s play becomes even more complex, which in turn helps with the development of the child (as cited in Berk & Winsler, 1995, p. 68). Gutek (2003) states that, Montessori, on the other hand, emphasizes that the initiative should come from the child and the teacher should spend more time observing and should start with observing. Gutek (2003) continues with Montessori even giving the teacher the name of directress to emphasize this aspect of education: learning should come from within the child, not externally (Gutek, 2003, p. 183). Vygotsky does emphasize the fact though that the adult should follow the child and not control the play (Berk & Winsler, 1995, p. 71). I believe, that the child should be the center of the play as well, and the adult should not control the play, but may participate in it.

According to Berk and Winsler (1995), when adults intervene in children’s play, they should be conscious of the level of development of the child. Similarly to Vygotsky, Montessori (1965) emphasized how the teacher should be aware of the changes in child’s behavior, through mainly observation (p. 15). The adult should consider the individual child and their social level to determine how much help they should provide. Berk and Winsler (1995) also state that the amount of help can range from suggesting what to say to the other child to developing empathy, by asking how the child themselves would feel like. Fur-
thermore, according to Berk and Winsler (1995) the adult should be active in being involved in children’s play, especially when there are negotiations. This is what Vygotsky believes (Berk & Winsler, 1995, p. 75). I, like Montessori, believe that it is also important for the child themselves to learn how to handle also conflicts. The adult should not intervene too easily.

2.3.3 Playing

A Montessori day care teacher would not interfere with children’s choice of activity, but the objects available themselves guide the activities available (Montessori, 1965, p. 65), for example certain objects are provided to help development. This can be linked to Vygotsky’s idea of the Zone of Proximal Development, the child should learn at an appropriate pace, the task at hand should be not too difficult but challenging enough to develop the child with the help of an adult or a more skillful peer. In a Montessori setting, the adult would mostly observe, but children are placed in groups with an age span of three years (Isaacs, 2012, p. 27), this could promote the Zone of Proximal Development through peer support. According to Vygotsky, being placed in mixed age groups can also promote make-believe play, which he emphasized as important for child development (Berk & Winsler, 1995, p. 78 – 79, p. 52).

Vygotsky states that playing is a social act and that caregivers are the ones who first interact with a child to play for example, peekaboo (Berk & Winsler, 1995, p. 63). Montessori (1965) in her approach minimizes teacher interaction and rather lets the child themselves decide what to play and who to play with, alone, with peers or the teacher (p. 15). What would happen to a child with no real social model of a caregiver or a passive caregiver who would enter a Montessori day care center, would they learn by watching their peers or would they rather play alone. Vygotsky suggests that the social aspect of play does move from child-caregiver interaction to child-child interaction, therefore this would suggest that even with a passive caregiver a child would eventually start playing with their peers and develop further this way (Berk & Winsler, 1995, p. 64).

Pit Stop 1

Time to get up and stretch! It is important to be physically active and it is advised to take breaks while sitting for long times (Sosiaali- ja terveysministeriö, 2015, p. 15). Therefore, I
advise you to stand up and reach for the skies with your hands up and standing on your tippy toes. Hold this pose for five seconds and repeat. Now you are ready to continue onto “Lap 2.”
3 Lap 2: Self-Determination Theory

Self-Determination Theory is often discussed with relation to external and internal motivation (with my research I corrected my terms to extrinsic and intrinsic motivation (Ryan & Deci, 2009, p. 173). The theory has been discussed throughout my Physical Education minor studies and this sparked my interest further. The Self Determination Theory is considered a puzzle by Vansteenkiste, Niemiec, and Soenens (2010), since it is constantly changing and it has been developed for many years and researchers continue to add their parts to the theory (p. 105).

3.1.1 Intrinsic and Extrinsic Motivation

One of the key elements of the Self-Determination Theory is to distinguish between intrinsic and extrinsic motivation. The theory is more concerned with the type of motivation, rather than the amount, and intrinsic and extrinsic motivation is the umbrella classification (Ryan & Deci, 2009, p. 173). The Basic Psychological Need and the Mini-theories use these terms for explanation and they are included in these aspects, therefore it is important to understand the difference between intrinsic and extrinsic motivation. Intrinsic motivation refers to actions which someone would do out of enjoyment and coming from the self, compared to extrinsic motivation which one would do to attain external outcomes, for example a test result (Vallerand & Ratelle, 2002, p. 37). There is also complete amotivation, which is considered in the Self-Determination Continuum (Ryan & Deci, 2002, p. 16). This continuum demonstrates the relationship among the type of regulation, motivation, and the level of relative autonomy (Ryan & Deci, 2009, p. 177). The most important aspect about this table is to notice that there are different levels of Extrinsic Motivation.

Table 1: Self-Determination Continuum (Ryan & Deci, 2009, p. 177).

<table>
<thead>
<tr>
<th>Amotivation</th>
<th>Extrinsic Motivation</th>
<th>Intrinsic Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonregulation</td>
<td>External Regulation</td>
<td>Intrinsic Regulation</td>
</tr>
<tr>
<td>Introjected Regulation</td>
<td>Identified Regulation</td>
<td>Integrated Regulation</td>
</tr>
<tr>
<td>Lack of Motivation</td>
<td>Controlled Motivation</td>
<td>Autonomous Motivation</td>
</tr>
<tr>
<td>Lowest Relative</td>
<td></td>
<td>Highest Relative</td>
</tr>
</tbody>
</table>
According to Ryan and Deci (2009), external regulation is that someone is completing a task just to avoid a punishment for example. The next on the continuum of introjected regulation means that someone is completing the task to avoid shame or guilt, therefore partially internal involvement of feelings. Ryan and Deci (2009) continue with identified regulation which has autonomous motivation and is characterized by that, the person has identified with the value of the task, and finally with integrated regulation the person has brought the task in relation to other values of self as well. In general the person, at least values the tasks on some level (Ryan & Deci, 2009, p. 176 - 177).

### 3.1.2 Basic Psychological Needs

The idea of humans being active and seeking challenges, dates back to Aristotelian times and this is also what the Self Determination Theory is based upon (Ryan & Deci, 2002, p. 3). According to Ryan and Deci (2002), the Self Determination Theory takes into consideration that humans have innate potential to grow, but also considers that some aspects of the social-contextual atmosphere promote and some hinder this human tendency (p. 5). Ryan and Deci (2002) continue with describing these aspects of the social-contextual atmosphere as: competence, relatedness, and autonomy. These are based on the psychological needs of humans and therefore referred to as Basic Psychological Needs in the context of the Self-Determination Theory. Competence refers to the feeling of confidence and success through the use of one’s own skills in a social context (Ryan & Deci, 2002, p. 6 - 7). Competence, for example can be felt by receiving positive feedback (Ryan & Deci, 2009, p. 173). Ryan and Deci (2002) describe relatedness as referring to the connection with other humans, the feeling of belonging and caring and being cared for by others. According to Ryan and Deci (2002), autonomy refers to having control over oneself and acting from own interest (Ryan & Deci, 2002, p. 6 - 8). Ryan and Deci (2002) state that autonomy is often lost in schools, since teachers often have an external prize or an evaluation process, since the external rewards may lower intrinsic motivation. Ryan and Deci (2002) continue with that autonomy could be gained, for example by giving students a choice of activity, or at least some options (Ryan & Deci, 2009, p. 173 - 174). Autonomy is a key factor according to Ryan and Deci (2009) for a school or a school system to succeed (p. 184). To support students in the classroom, teachers should provide choice and supportive feedback to students, rather than rewards and evaluations to support students’ autonomy and self-
regulation (Ryan & Deci, 2009, p. 174). This will be further discussed in the final section, but I have experienced all of these in my own experience in teaching and coaching.

3.1.3 Mini-theories

The Self Determination Theory has evolved into mini-theories which link together to form the complete theory framework. Ryan and Deci (2002) mention four mini-theories: Cognitive Evaluation Theory, Organismic Integration Theory, Causality Orientations Theory, and Basic Needs Theory (p. 9 - 10). Vansteenkiste et al. (2010) add to this a fifth mini-theory, the Goal Content Theory (p. 106). According to Vansteenkiste et al. (2010) these mini-theories have been added onto by many researchers around the world over the years (p. 106). The Cognitive Evaluation Theory, which Deci theorized, based around intrinsic motivation was the first theory to emerge within the Self-Determination Theory (as cited in Vansteenkiste et al., 2010, p. 106). Deci theorized that children have intrinsic motivation to explore the world around them and in doing so this creates enjoyment, similarly to what Montessori believes (Vansteenkiste et al., 2010, p. 106 – 107; Isaacs, 2012, p. 102). Intrinsic motivation is especially gained through the satisfaction of autonomy and competence (Vansteenkiste et al. 2010, p. 109). According to Vansteenkiste et al. (2010), the Organismic Integration Theory, on the other hand, is concerned rather with extrinsic motivation. Furthermore, there is also a general shift from the childhood intrinsic motivation to adulthood extrinsic motivation, for example traffic laws and thesis writing (Vansteenkiste et al., 2010, p. 112). Ryan and Deci discuss the term internalization in regards to extrinsic motivation, if one internalizes a certain set of activities, they are more likely to follow these certain set of activities willingly (Vansteenkiste et al., 2010, p. 113). It is important to note as well that there are different levels of extrinsic motivation for this very reason (Vansteenkiste et al., 2010, p. 113). The Self-Determination Continuum discussed earlier is based on this specific mini-theory (Ryan & Deci, 2009, p. 177).

The Causality Orientations Theory rather concentrates on individual differences, rather than general aspects of motivation (Vansteenkiste et al., 2010, p. 125). Vansteenkiste et al. describe the Causality Orientations Theory as people tend to follow the autonomy, control or impersonal orientation. The people who follow the autonomy orientation follow their own interests and tend regulate their behavior autonomously, people who follow the control orientation interpret external events as pressuring and therefore act with control, and
Lastly people who are high on the impersonal orientation view their life experiences as beyond their control and therefore often feel helpless and passive (Vansteenkiste et al., 2010, p. 125 - 126). It is important to note that all three of these are present in each individual, but at varying strengths (Vansteenkiste et al., 2010, p. 126). The Basic Psychological Needs Theory, or simply Basic Needs Theory, simply includes the three minimal needs discussed earlier: autonomy, competence and relatedness (Vansteenkiste et al., 2010, p. 131). These three basic needs provide energy to humans, they are innate, and people cope with the lack of these needs in negative ways (Vansteenkiste et al., 2010, p. 134). Finally, according to Vansteenkiste et al. (2010), the Goal Content Theory has expanded from the Basic Psychological Needs to research intrinsic and extrinsic life goals. Furthermore, according to Kasser and Ryan (2010), Vansteenkiste et al. give examples of intrinsic life goals as physical health and close relationships, compared to money and fame which are extrinsic goals (as cited in Vansteenkiste et al., 2010, p. 145). The intrinsic goals are more connected to the Basic Psychological Needs, than extrinsic goals, since they are not as closely related to the self (Vansteenkiste et al., 2010, p. 145). Vansteenkiste et al. (2010), further theorize that people have a tendency to move from extrinsic goals to intrinsic goals to be truly satisfied with life (p. 146). This is ironically the opposite tendency from children moving from intrinsic motivation to extrinsic motivation as they grow up (Vansteenkiste et al., 2010, p. 112). In total, these mini-theories are combined to form the complete Self-Determination Theory and research is ongoing since many people are interested in this specific topic of motivation.

**Pit Stop 2**

Congratulations, you have completed another lap, therefore it is time to get up and stretch again. This “Pit Stop” I advise you to stand up and twist your upper body to both directions with your arms spread parallel to the ground. Repeat this five times in each direction. Now you are ready to continue reading.
I believe that games can in general work similar to Vygotsky’s scaffolding theory. When a student is learning a new skill, while playing a game, they automatically have to push themselves even further since they need to also consider the rules of the game and if applicable the social aspects of playing a game. This demonstrates the benefits of play. Montessori mentions the idea of flourishing, and how this can be achieved through exploring. According to Isaacs (2012), parents realize that their children need personal satisfaction in order to flourish (p. 98). This is one reason why parents find Montessori a fitting day care approach. I would argue that Montessori’s Children’s House is an environment which promotes the general tendency of humans to explore, in other words the Children’s House would support the Self-Determination Theory of Ryan and Deci.

Ryan, Connell, and Plant (1990) designed a study to research the effect of interest on learning, they gave an article to college students to read, and later they tested them on the information in the article, and the conclusion was that the people who were more interested in the article tended to do better than the ones who were not as interested (as cited in Ryan & Deci, 2009, p. 175). This suggests that the joy and interest in education is indeed important.

Aristotle already was thinking that humans are naturally active (Ryan & Deci, 2002, p. 3), this is much like Montessori. According to Montessori, children did not need to be motivated externally, like Ryan’s and Deci’s extrinsic motivation, but rather children already are prone to self-activity internally (Gutek, 2003, p. 178). This relates to the idea of the intrinsic motivation, coined by Ryan and Deci, and refers back to the Aristotelian times which I mentioned earlier, of humans being naturally active and seeking challenges (Ryan & Deci, 2002, p. 3). On the other hand, though external pressure can actually diminish intrinsic motivation, but teachers can also enhance intrinsic motivation by positive feedback, for example (Ryan & Deci, 2009, p. 173).

Montessori emphasizes children’s self-development and self-discipline and these in turn teach children to be independent and to have the freedom and competency to act for oneself (Gutek, 2003, p. 184). This is very closely related to the Basic Psychological Needs of Ryan and Deci. Montessori is especially concerned with the idea of autonomy and how the child should be in control of their own learning, similar to the idea of Ryan and Deci.
(2002, p. 8). Also, the idea of competence (Ryan & Deci, 2002, p. 7), relates to Montessori allowing the child to explore the Montessori’s didactic materials on their own and master them at their own pace. Out of the Basic Psychological Needs, Montessori does not consider relatedness in much detail, but the environment of learning in general should be safe and there should be no interruptions to learning (Gutek, 2003, p. 181).

Vygotsky’s idea of the Zone of Proximal Development includes the processes of internalization and externalization as mentioned by Tudge and Scrimsher. According to Vygotsky, as cited in Tudge and Scrimsher, when a child is learning through the Zone of Proximal Development, they first externalize the information since the information is gathered by a social interaction between two people. Tudge and Scrimsher continue describing Vygotsky’s phenomenon: after the child has truly learned the new task through understanding it, the information becomes internalized (as cited in Tudge and Scrimsher, 2003, p. 213). In the Montessori approach a similar aspect of learning happens with the repetition and mistakes until the child masters some new task (Gutek, 2003, p. 178). This phenomenon by both Vygotsky and Montessori, can be related to Ryan’s and Deci’s idea of intrinsic and extrinsic motivation, and how a child at first might be extrinsically motivated by rewards, and later they may become intrinsically motivated (Vallerand & Ratelle, 2002, p. 37 - 40.

Based on the idea of internalization, the ideal teacher could change extrinsic motivation to intrinsic motivation and truly internalize the joy of learning.

4.1 The Role of the Teacher/Coach

Montessori’s idea of the teacher observing the children and the idea of intrinsic motivation coined by Ryan and Deci (2009) fit well together. Children will naturally explore objects and the environment since they are innately interested in doing so. Compared to what Ryan and Deci (2009) have found that tangible extrinsic motivation, for example money, can actually diminish intrinsic motivation, along with this they have found that positive performance-relevant feedback can increase or at least maintain the level of intrinsic motivation (p. 173). Based on this it is important for the teacher to begin with, to know what type of motivation is motivating the students and each individual student. Ryan and Deci (2009) also encourage the teacher to engage with the students and support the students’ autonomy (p. 183). This I have realized in my own coaching, which I will explore later.
According to Vallerand and Ratelle (2002), the role of the teacher is significant in motivation, if the teacher is negative enough to the student, the student’s motivation might go from intrinsic motivation to extrinsic motivation. This would mean that the student would not enjoy what they used to enjoy before, just because of the teacher, and would only complete tasks due to external pressure (p. 39). This can also be related to the Montessori approach with the accessible environment through which children can play and learn from their own mistakes by repetition, rather than being told what to do by an adult (Gutek, 2003, p. 178). This is exactly what happened to me when I was swimming competitively as a child, I eventually quit, because I felt like the coach was putting too much pressure on me and I was not intrinsically motivated to swim anymore. An important aspect of being a teacher is realizing which motivation is an individual student driven by (Vallerand & Ratelle, 2002, p. 39). It is important not to hinder the motivation if it is intrinsic, or if it is extrinsic this should be taken into consideration and encouraged to become intrinsic, if possible.

Two examples of teachers who exemplify the positive aspect of playing and motivation are Essi Rantala and Joe Dombrowski (Vähäsarja, 2017; NowThis, 2017). According to Vähäsarja (2017), Essi Rantala started working as a physical education teacher at a school in Finland and she motivated students and their parents to start exercising. Vähäsarja (2017) continues describing Rantala as a motivator, especially by emphasizing relatedness (Ryan & Deci, 2002) since Rantala has put effort into making everyone feel welcome and to also get students’ parents, siblings and other friends involved. Another strong suit of Rantala, according to Vähäsarja (2017), has been autonomy (Ryan & Deci, 2002), since she is now planning the physical education courses for next year by asking the students what they want to do and she has included in her lessons sports ranging from bodycombat to acroyoga. Also, with this Rantala gives her students the sense of competence (Ryan & Deci, 2002), since with the wide range of sports, she hopes for each student to find at least one sport they feel like “is their own.” In general, with combining these Basic Psychological Needs, Rantala has motivated students to move and has made a positive impact on how physical education is viewed. The other example of Joe Dombrowski is a fourth-grade classroom teacher who makes sure his students have fun. He wants his students to enjoy school and according to NowThis (2017, he states that school should be a place where students want to come and not where they have to come. Dombrowski is motivating his students by having fun, for example with pranks and funny ways of walking to class and lin-
ing up after recess (NowThis, 2017). This relates to both Vygotsky’s and Montessori’s ideas of playing being an important part of learning and education, especially for children, but also seems that Dombrowski is enjoying this fun himself. He wishes that all teachers would teach with a passion. These two are great examples of how students can be motivated to learn and how they can actually enjoy learning.

**Pit Stop 3**

One last “Pit Stop” to make it through the thesis. Time to get up and stretch one final time! Roll your shoulders forward five times and backwards another five times. Shake your legs and you may sit down and continue reading for the “Final Lap.”
5 Final Lap: Discussion

5.1 Own Experiences

To conclude we will drive one final lap backwards to explore these theories based on my own experiences from the past. The goal is to have possible ideas how the theories can be applied to practice. At the moment, most of my teaching experience is through coaching, therefore this section will mostly focus on coaching, rather than traditional teaching in the classroom.

5.1.1 Pyrintö

Pyrintö is a sports organization for track and field and I have been coaching a few different non-competitive groups of teenagers. I have been active with the organization for a year and I have gained valuable practical knowledge. I will explore through a few examples and apply the theories discussed in this thesis to add practical aspects to the thesis, since that was my initial goal.

I enjoy playing games in the beginning and in the end of the sessions to warm up and cool down and to have some fun. We often play dodgeball, where the students are in a circle and a person around the circle is trying to “burn” the people inside with a ball. I at one point decided to include muscle strength exercises, like squats and sit-ups, to this game. If a student gets “burned” they must do a certain amount of each exercise. I tried to make these exercises more fun, and therefore hopefully more motivating, by including them in a game. Furthermore, I gave students autonomy, by having them choose some of the exercises we shall do, hence increasing motivation even further (Ryan & Deci, 2002). In general, I listen to the children, on which game they would like to play at the beginning and end.

We ran the Cooper during practice. The Cooper is to determine how far can one run in 12 minutes. There seemed to be clear differences among the children who were excited to run it and those who were not, based on observations the people who enjoyed running, they ran further. This is seen often during practice and this directly relates to the idea of extrinsic and intrinsic motivation (Ryan & Deci, 2009). Some of the students are intrinsically motivated by certain sports, and they tend to perform better and with more enthusiasm, than the
ones who are doing it due to external pressure. This can also be seen with negative influence and how this can demotivate students. For example, when we practice high jump, one person starts with “I cannot do this,” and often many people follow their lead, hence this is a negative example of relatedness and social pressure. I try to keep a positive atmosphere though and give positive feedback and encouragement.

In one of my groups there is a girl who demonstrates some of the motivation theories well. She is not the best athlete, but she tries her best. At times though, she becomes demotivated during a certain activity and that is when she wants positive encouragement. She needs external motivation to continue. After she receives encouragement and motivation she finishes the task well. She closely relates to the relatedness factor of the Basic Psychological Needs (Ryan & Deci, 2002), since she gets motivated by feeling like she is appreciated and that she is safe and welcomed in the group. She also wants to enhance her competence, which can be done through positive feedback according to Ryan and Deci (2009). She is one of the reasons why I appreciate my job as a coach, since I can see my positive impact directly.

At the end of the season, we the coaches could make a choice if we wanted to take our group to do tests which would have included the usual 20 meter dash, five leap distance, long jump without speed, shot put, and 1000 meter run. We did this set with the group in the fall, but I decided not to do it in the spring. It would have been a great opportunity for the teenagers to see if they had improved, but I still felt that it might have caused more harm than good. I did not want to create external pressure and therefore extrinsic motivation, especially for the students who are intrinsically motivated (Ryan & Deci, 2009, p. 176). On the last day of the season, I rather chose to have fun and play games with the children, promoting joy and not at least hindering intrinsic motivation, with external pressure (Ryan, Deci, 2009, p. 173). I hope with this choice, the students can enjoy their summer with a positive mind about exercise.

5.1.2 Lohet

Lohet is a swimming organization based in the city. I have been a swimming coach for teenagers in two competitive groups for this spring. Even though my own experiences in swimming were not pleasant due to the coach, I have still enjoyed the sport and it is great to be able to coach others in it. I am also excited about being able to teach children to swim
this summer as a swimming teacher. I want to bring the children and teenagers the joy I have for the sport.

I have realized that Ryan’s and Deci’s (2009) Self-Determination Theory relates closely to my experience as a swimming coach, especially in the aspect of autonomy (p. 174). The children seem to be more motivated to swim their choice of stroke, instead of the ones that I or the other coaches tell them to swim. The level of excitement, also depends on which stroke. The butterfly stroke is generally the most difficult one, and this stroke usually receives the least amount of enthusiasm from the group of swimmers. Only a few would choose to swim butterfly. This example demonstrated how important choice is in relation to motivation.

5.1.3 Writing This Thesis

I have struggled to write this thesis. I have lacked general motivation at times, since it seemed a too consuming of a task. When I started writing though, I enjoyed it, according to the Self-Determination Continuum (Ryan & Deci, 2009, p. 177), to the level of approximately integrated regulation. I found the value of writing a thesis and it fits with my core sense of self, since I enjoy research. I would argue though that it was not completely intrinsic motivation, since I might not have completed the thesis without an external deadline. I felt more motivated though, while not remembering the deadline which can relate to the diminishing of motivation with external pressure (Ryan & Deci, 2009, p. 173). For me the external pressure was both a positive and a negative force.

Furthermore, two aspects of writing this thesis motivated me which were that I could play with my thesis and that I could apply the theories to practice and analyze my own experiences. Some of the examples given in the Pyrintö and Lohet sections happened during my writing process, therefore I received instant feedback on exploring the theories in practice. Also, I had fun writing this thesis due to being able to add the Pit Stops and the story to my thesis. I was encouraged to play with my thesis due to Larsen (2010) emphasizing the importance of creativity in research in order to make the most out of it and for it to become as useful as possible. I enjoyed the writing process, therefore I was more motivated to write this. I wonder if the reader enjoyed reading it more due to the fun elements added.
5.2 Future Laps: Future Research

I am interested in following this topic further, but from different perspectives. I did not have a geographical focus or one specific curriculum in mind when researching, but one possibility would be to look at curricula and how they perceive play and motivation intertwined, for example Opetushallitus (2016) in the new Finnish national core curriculum it is mentioned that each student has the right to succeed and education should foster lifelong learning (p. 15). I mention this curriculum, because it is the base of my current context. I would also be interested in comparing countries and curricula. Another curriculum I would be interested in exploring is the International Baccalaureate curriculum, since I have had personal experience with this program and it is international. I am also interested in furthering the research more into the physical education either in schools or in sports organizations or clubs.

One thought that has been with me since the beginning of my thesis, after a peer mentioned it during my presentation, is if learning should always be fun and should children also do tasks they do not enjoy. Olson (2009) discusses the fact that true learning does require some struggle, learning is not easy (p. 34-3). Also, is it possible to learn something completely new without a struggle? I have at least found based on personal experiences, that the aspects of learning I have been struggling with, have stayed with me longer, also if I truly understand the theory this helps. This thesis is an example of an educational struggle, which is a part of learning, especially true, valuable and long-term learning. For the scope of my thesis I did not do much research about this topic, but this is of interest for possible future research.

Another area of research to develop further is the concept of imaginative play and to what is the adult’s relation to it. Montessori and Vygotsky have differing levels of involvement. Lettings children play and explore is important, but what if the children are in danger of hurting themselves, should the adult intervene. Also, if the imaginative play includes adult content, for example sexual scenes, should an adult intervene or not. These are some of the thoughts that have emerged during the research process.

Originally, I was planning on exploring elementary school, but then I realized that playing is more present in early childhood education. I chose to start from early childhood education and in the scope of my bachelor’s thesis ended up with just early childhood education. I would like to further the idea of playing in schools and even in workplaces with my later
theses. I do not understand why playing should finish after day care. I want to continue this study and design practical methods to include playing and the joy of learning as a life-long learning process in formal education.
6 The End

The little girl from the beginning of this thesis, has now fulfilled a milestone in her life. She has officially become a woman, by completing her thesis. She is now much wiser than before, and she even had fun while learning. This thesis provides her with a sense of accomplishment and motivation to continue her researching path. She now lives happily ever after with her completed thesis and is anticipating the next story with her Master’s thesis.

By the way, did you complete the treasure hunt? If you noticed any spelling mistakes, congratulations those extra letters combine to form a little life advice “try to always have a little bit of fun,” and I mean that. Enjoy!
7 Victory Lap: References


