| CHAPTER 8 |

Psychosocial Milestones in Adolescence: Key Developmental Tasks

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ABSTRACT

Sexual maturation in adolescence is an intense process involving hormonal alterations, the appearance of secondary sex characteristics, and structural and functional changes in the brain.

The basis and precondition for adolescents' changing psyche is the transition from concrete to formal thinking, enabling hypothetical thinking, combinatorial thinking with deductive or inductive reasoning, abstractive thinking, and metacognition. With formal thinking, the ability to contemplate oneself and others appears, leading to the emergence of adolescent egocentrism, criticism, philosophising, making life plans, etc.

During adolescence, various aspects of identity involved in shaping both the individual and social self, become integrated. Core components of identity are established, autonomy is expanded, and the processes of identity formation and differentiation unfold. As adolescents develop their own personal systems of self-defined standards, they reorganise their self-concept, gaining a sense of integration and autonomy. Biological changes trigger the formation of gender identity, and some adolescents begin to regulate their behaviour based on abstract principles and values.

In adolescence, young people increasingly form enduring and deep relationships outside their family homes. Friendships with peers of both genders take more advanced forms, and a new type of closeness associated with romantic involvement emerges, preparing adolescents to build mature relationships.

Adolescents revise the circle of people they once considered as meaningful as new sources of role models appear. Parents and teachers lose the status of authority figures, although they frequently maintain some influence on young people's choices of role models. Adolescents increase demands on their parents to allow them more freedom and control over their lives and put them to various tests to see if they can accept and are ready to support them.

Adolescence can compound emotional and digital addictions affecting young people and increase their risk of becoming juvenile delinquents.

KEYWORDS

adolescence, puberty, formal operational thinking, identity development, status of identity, gender identity, post-conventional phase of moral development, peers, friendship, romantic relationship, parents, developmental disorders

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1. Introduction

In adolescence, being the second decade of human life, young people undergo intense changes influencing their biology, cognitive abilities, identity, and social relationships. As a result, they start contemplating what kind of people they want to be and seeking their place in society.

2. Biological Changes in Development

Adolescence is a tumultuous period of life because of the multitude of developmental changes transforming the human body. One of these changes is gonadal and behavioural maturation related to the pubertal transition to adulthood.

2.1. Puberty Hormones, Secondary Sex Characteristics and Body Changes

Puberty is a biological process of sexual maturation that culminates in reproductive competence[1]. It tends to be considered as the defining event in human life, as it initiates the passage from childhood to adolescence[2].

During puberty, boys and girls experience rapid increases in both height and body mass, a phenomenon known as the pubertal growth spurt. Girls enter puberty at a younger age (8-13 years) than boys and reach their adult height between 10 and 16 years of life. In boys, a rapid body growth starts at a slightly older age, usually when they are 10-16 years old, and stops between the ages of 13 and 17. The adult height of both boys and girls is determined by their genes and external factors such as diet, medication taken, diseases, etc.

Adrenarche and gonadarche are two stages of pubertal maturation, during which the hypothalamic-pituitary-adrenal axis is activated, and the hypothalamic-pituitary-gonadal axis causing gonadal activation is reactivated, respectively. The activity of puberty hormones usually starts between ages 7 and 13 in people assigned female at birth, and between ages 9 and 15 in those assigned male at birth. The onset of puberty occurs at a slightly different time for each individual.

Puberty is initiated when the brain starts sending hormonal signals to the gonads: namely the female ovaries and male testicles. While before puberty only the external sex organs, referred to as primary sexual characteristics, distinguish boys from girls, its onset is followed by the emergence of sexual dimorphism related to the development of secondary sexual characteristics, which further differentiate the sexes. Follicle-stimulating hormone (FSH) and luteinizing hormone (LH) instruct the ovaries in females to begin producing oestrogen, one of the primary female sex hormones, and eggs. As a result of puberty hormones, girls grow taller, put on weight

1 Sisk and Foster, 2004, pp. 1040–1047.
2 Steinberg, 2008, pp. 78–106.

and muscle mass, begin to menstruate, and develop fuller breasts and wider hips than boys. Body hair starts to grow on their legs, in the armpits and pubic areas, emotions may become more volatile and intense, and acne more prevalent. Body odour can be stronger too. In boys, puberty hormones stimulate the testicles into producing testosterone, the male sex hormone, and sperm. In addition to growing taller and putting on weight and muscle mass, boys develop larger sex organs and become capable of ejaculation (releasing sperm). They too develop body hair on their legs, in their armpits and pubic areas, suffer from acne or other skin problems, and may produce stronger body odours.

As well as contributing to significant changes in adolescents' secondary sexual characteristics, sex hormones may also have an effect on their ability to learn, their intelligence, memory, and behaviour.

2.2. Brain (Prefrontal Cortex) Changes and Their Psychological Consequences

Puberty gives rise to significant changes in brain structure and function. During this period, the developing brain increases its dimensions and mass, its cells differentiate and mature, myelinisation occurs, and new connections between various brain structures are formed. At the same time, the surplus synapses are regressively eliminated.

An important role at this developmental stage is played by the rapidly accelerating synthesis of sex hormones, such as oestrogen, progesterone and testosterone, which stimulates myelinogenesis, leading to the isolation of axons, etc[3].

The prefrontal cortex is one of the last regions of the brain to reach maturity (its full maturity is only observed at the age of around 25 years), which seems to explain why some adolescents act immaturely[4].

Covering the front part of the frontal lobe of the cerebral cortex, the prefrontal cortex determines the individual's ability to make rational judgments in challenging situations. Its responsibilities include cognitive analysis, abstract thinking, moderating behaviour appropriately to social contexts, and aligning thinking and actions with the goal to be achieved. All these operations are enabled by data received from all the senses.

MRI examinations have shown that the frontal lobes of the adolescent brain contain less white matter (myelin) than the adult brain and that its amount increases during puberty[5]. The process involves the growth of major neurocircuits, which facilitate the distribution of information among the regions of the brain. These observations have inspired the concept of frontalisation, according to which the prefrontal cortex develops to regulate behavioural reactions initiated by the limbic structures. The maturation of the prefrontal cortex and limbic structures improves self-control, facilitates communication between the brain's hemispheres, and gives access to a

3 Arain et. al., 2013, pp. 449–461.
4 Bancroft, 2011.
5 Buyanova, Arsalidou and Cerebral, 2021.

resource of analytical and creative strategies for resolving complex dilemmas. The signs of the abnormally slow maturation of the newly emerging structures include risky and impulsive behaviour potentially leading to accidents, the use of drugs, risky sexual choices, as well as affective disorders[6].

2.3. The Psychosocial Consequences of Puberty

The changes that adolescents observe as they undergo puberty cause them to start assessing and comparing their bodies with their preconceptions of themselves and the bodies of their peers, or with the prevalent standards of beauty and behaviour. As they look more adult than they did before, their parents and other people start to treat them accordingly.

Early or delayed puberty affects the functioning of boys and girls differently. Premature puberty is less of a problem for boys, and its delayed onset has a weaker effect on girls[7].

2.3.1. Girls

Early maturing girls have to come to terms with somatic changes, including menstruation, which can make them feel embarrassed and uneasy as they are not ready for them. Remarks about their appearance, whether rude or complimentary, can also be disconcerting for them. Their misleadingly adult appearance may provoke inappropriate comments, encouraging them to engage in premature sexual activity.[8] The inconsistency between their appearance and their mental preparedness for it can cause the onset of many adverse consequences, including lower self-esteem, identity building problems, emotional disorders, greater distrust in others, diminishing popularity with peers, which sometimes leads to behavioural and eating disorders. Girls who mature early tend to be perceived by adults as mature grown-ups and, consequently, are expected to behave accordingly. On the other hand, later maturing girls rarely experience adjustment problems. Their developmental changes are less conspicuous, and their similarity to their peers makes it easier for them to adjust and function in the community.[9]

2.3.2. Boys

Premature maturation is less problematic for boys. Early-maturing boys are taller and have a stronger physique than those who mature late. They have more positive perceptions of their bodies, believe in their strength and resilience, and their parents grant them more privileges and allow them more independence. Because of the self-assertion and independence that they demonstrate, they are usually popular with peers

6 Arnett, 1999, pp. 317–326; Forbes and Dahl, 2010, pp. 66–72; Patton and Viner, 2007, pp. 1130–1139; Paus, Keshavan and Giedd, 2008, pp. 947–957 ; Steinberg, 2008, pp. 78–106; Pfeifer and Berkman, 2018, pp. 158–164; Romer, Reyna and Satterthwaite, 2017, pp. 19–34.
7 Boyd and Bee, 2019.
8 Mendle, Turkheimer, Emery, 2007, pp. 151–171.
9 Turner and Helms, 1995.

and become leaders within their social groups. However, they are also more at risk of using psychoactive substances and starting their sexual life early[10]. Boys who mature late are unhappy about their bodies. Their peers tend to see them as children and their requests and needs are often left unaddressed. They are usually less good at sports than their peers because they are weaker than them, and they also make less attractive mates. As a result, they are frequently isolated and targeted as scapegoats[11].

3. Cognitive Changes: Piaget's Formal Operational Stage

Changes taking place in an adolescents' psyche are predetermined by and based on the development of formal operational thinking.

3.1. Characteristics of Formal Operational Thinking

Early adolescence involves the gradual development of formal operational thinking, i.e., the ability to use interiorised pictures, signs, mathematical and logical symbols, etc., unrelated to perceptions, experiences, and beliefs, with each link of the reasoning chain being examined in the context of the problem at hand[12].

At this stage of development, young people become capable of hypothetical thinking, combinatorial thinking with deductive or inductive-reasoning, abstract thinking, and metacognition.

Hypothetical thinking enables the individual to draw conclusions, not only from what can be seen but also from what is hypothetical based on interiorised data; the reasoning it involves moves from what is concrete to what is possible, probable or conditional ("if", "may be…", "assuming", "what might be"). Hypothetical thinking is more than just a thinking process for considering options; it is a logic-based system designed to construct hypotheses, make evaluations, formulate rules, and draw conclusions based on a systematic and logical examination of possibilities to produce many potential answers.

Combinatorial thinking underlies hypothetical-deductive reasoning and inductive reasoning, which combines and evaluates potential options in each situation. Hypothetical-deductive reasoning enables inferences from the general to the specific, and inductive reasoning in the opposite direction.

Abstract thinking is a type of advanced reasoning about concepts that lie beyond the physically observed, which enables a range of mental operations, such as recognising patterns, analysing ideas, synthesising information, solving problems, and creating things.

Formal operational thinking also participates in metacognition, i.e., thinking about one's thought processes, including thinking about one's self.

10 Kaltiala-Heino et al., 2001, pp. 346–352.
11 Turner and Helms, 1995.
12 Inhelder and Piaget, 1970; Vasta, Haith and Miller, 2004.

One of the experiments developed to measure a person's level of formal operational thinking makes use of a pendulum[13], consisting of a length of string and a set of weights. The experiment requires indicating which of the three variables – the length of the string, the heaviness of the weights, and the strength of the push – determine the frequency of the pendulum's swing. To be able to answer that the length of the string is both a necessary and sufficient determinant of the swing, the person being tested must systematically examine all possibilities, which requires their reasoning to transition from what is possible to what is true.

3.2. Adolescent Egocentrism: Imagery Audience and Personal Fable

Adolescent egocentrism is the tendency of adolescents to focus on their thoughts while contemplating what others think about them. It is related to excessive self-awareness and the inability to draw a line between the perceptions of other people and one's own views, which are considered the only possibility[14].

Unlike children, adolescents understand that people differ in how they see things and think about them. According to David Elkind[15], egocentrism appears in adolescents as they start to show interest in what others think, while still being unable to separate their presumptions from others' actual concerns.

Adolescent egocentrism consists of two important aspects, namely the imaginary audience and the personal fable[16].

3.2.1. The Imaginary Audience

Adolescents believe that they are in the focus of others' attention and everything they do is assessed, judged, and scrutinised. As a result, they persistently analyse what others would think about their behaviour in various situations. Being very self-critical, they assume that other people share their critiques and worry that they know about and focus on their weaknesses as much as they do. Even the most innocent comment coming from this imaginary audience can either boost their self-respect and self-confidence or throw them into despair. With the imaginary audience in mind, adolescents concentrate on their appearance and the possession of fancy gadgets. They also behave noisily and engage in risky behaviour to be noticed by and impress others.

3.2.2. The Personal Fable

The term was coined by David Elkind to describe a state corollary to the imaginary audience. The personal fable refers to a belief typical of adolescents that they are unique (thus beyond others' comprehension), omnipotent (endowed with special authority, powers, or influence), and invulnerable (resistant to harm and injury, and even

13 Inhelder and Piaget, 1970.
14 Galanaki, 2017; Turner and Helms, 1995.
15 Elkind, 1967, pp. 1025–1034.
16 Alberts, Elkind and Ginsberg, 2007, pp. 71–76.

immortal)[17]. The belief weakens impulse control in adolescents, frequently causing them to engage in risky behaviour, since they are undaunted by consequences.

Adolescent egocentrism appears in early adolescence (11-12 years), peaks in 14-15-year-olds, and diminishes with the development of formal thinking and the establishment of interpersonal intimacy.

3.3. Non-Cognitive Consequences of the Emergence of Formal Operational Thinking

Formal operational thinking underlies the ability to consider what is abstract, hypothetical, and goes beyond the present, and to reflect on oneself and the world in new ways[18].

The development of formal operational thinking in adolescents is headed by:

- criticism: noticing that people's behaviour and their principles may diverge (criticism, hypercriticism, and reflectiveness) and that adults have weaknesses;
- dreaming and making life plans: envisioning one's future separately from the present reality;
- creativity: writing poems, memoirs;
- philosophising: an inclination to delve into moral and social issues and worldviews;
- interest in literature: studying symbols, metaphors, and the meanings of words; examining literary techniques; the use of irony, humour, and abstract notions;
- temporal integration: an ability to integrate past, future and present events (thinking in terms of historical chronology).

4. The Portrait of a Developing Adolescent: Directions of Change

The developmental changes in adolescents primarily influence their relations with other people (due to separation and autonomy building). Adolescence is also the time when young people are building their identities, searching for the meaning of life, deepening relationships, experiencing friendship, and building their first relationships in pursuit of their own social niche.

4.1. Identity Formation: Individuation Process of Adolescence

Identity formation in adolescents is associated with the development of their internal, subjective understanding of who they are as individuals. Through the process they perceive themselves more and more as distinct and independent entities and build their own sense of agency as they gain the capacity to use increasingly complex tools to meet their needs[19]. Among the key components of identity are distinctiveness

17 Galanaki, 2017.
18 Dolgin, 2011.
19 Brzezińska, Ziółkowska and Appelt, 2019.

(a sense of being unique and disparate from others), continuity (a sense of being the same over time), and coherence (a sense of being similar across life domains) are indicated most frequently[20].

According to Margaret Mahler's concept of separation-individuation, a child's personality is formed through the relationship with their mother (a close caregiver) during the first three years of life, which gradually evolves from a symbiotic relationship to a stable individual identity[21].

Peter Blos[22] modified Mahler's concept, suggesting that the separation-individuation stage in childhood can be a precursor to a "second individuation" in the period of maturation. According to Blos, while the primary outcome of the first separation-individuation stage is the child's ability to make a distinction between "I and not I" (the child's awareness that he or she exists as an individual), the second individuation builds a sense of identity that closely corresponds to Erikson's[23] notions of the consolidating ego identity[24].

Blos concluded that adolescence is the time when earlier developmental changes that had gone astray or ended prematurely are modified or corrected[25]. Psychological restructuring related to the second individuation has an ultimate effect on an individual's adult personality and self-awareness[26].

A child progressing from a symbiotic relationship with the mother to separation from her also develops internal regulatory abilities, which are supported by developmental changes in adolescence. The individuation of adolescents is a reflection of structural changes accompanying the child's emotional separation from their figures of attachment. Successful separation is a prerequisite for the individual to be capable of finding intimate partners in the future.

4.2. Erik Erikson's Crises of Adolescents: Identity or Role Confusion

The fifth stage of Erikson's theory of psychosocial development, falling between the ages of 12-18 years, is referred to as the identity vs. role confusion crisis[27]. The crisis initiates identity formation in adolescents and requires synthesising and integrating earlier integrations into a new identity, uniquely one's own, in order to be solved. The 12-18-year olds painstakingly review their values, beliefs, and goals in the search for a sense of self and identity. The period when they consider social roles to find one that will offer them uniqueness and "try on" different roles and groups to identify

20 van Doeselaar et al., 2018, pp. 278–288; Meeus et al., 2012, pp. 1008–1021.
21 Mahler, Pine and Bergman, 1975.
22 Blos, 1962.
23 Erikson, 1963.
24 See: Rzechowska, 2025, pp. 218-220.: 4.2. Erik Erikson's crises of adolescents: identity or role confusion.
25 Blos, 1962.
26 Blos, 1979.
27 Erikson, 1980.

with, known as a psychosocial moratorium, enables them to form cohesive, positive identities that will allow them to contribute to society[28].

Finding a positive solution to the identity vs. role confusion crisis depends on the adolescent's readiness to accept their own past and establish a continuity with previous experiences. The search for an identity comes to an end with the adolescent finding answers to questions such as "Who am I?", "Where am 1 going?" and "Who will I become?". The adolescent must develop a commitment to religious beliefs, vocational goals, a philosophy of life and accept their own sexuality. These components of an ego-identity are essential for the emergence of sexual and affectionate love, deep friendship, and personal self-abandon without fear of losing ego-identity. They enable adolescents to progress to the next stage in the human life cycle, namely intimacy versus isolation[29].

Adolescents who fail to find their identity experience self-doubt, role diffusion, and role confusion, which may lead to a self-destructive preoccupation or activity. Some may continue to be morbidly preoccupied with what others think of them, while others may throw away others' opinions and take to drugs or alcohol in order to calm the anxiety of role diffusion, or withdraw. In its most severe form, identity diffusion may lead to suicidal ideation and suicide attempts.

Adolescents are more likely to resolve their identity crisis with a positive outcome in social contexts that provides support, guidance, and opportunities for exploration. A supportive family environment plays a key role, as families that offer emotional support, open communication, and encourage independence allow adolescents to explore their identity in a secure setting. When parents are nurturing and provide structure, adolescents are more likely to develop a strong sense of self. Positive peer relationships are also crucial, as peer groups that encourage authenticity and personal growth help adolescents share experiences, experiment with different roles, and receive feedback.

Educational settings that promote personal development, creativity, and critical thinking further aid in the identity formation process. Teachers and mentors who encourage self-discovery can help adolescents explore their interests, values, and goals. Similarly, involvement in community activities, such as clubs, sports, or volunteer work, offers adolescents the chance to engage with broader social networks, fostering a sense of belonging and purpose.

Cultural and societal values that prioritise individual expression, autonomy, and diversity create an environment where adolescents can experiment with different identities without fear of judgment. Societies that offer a variety of role models and multiple paths to success give adolescents more space for positive identity development. Lastly, having access to mentors or role models, whether within the family, school, or community, helps adolescents envision possible future selves and make informed decisions about their identity. All these social contexts work together to

28 Erikson, 1968.
29 Erikson, 1980.

support adolescents in navigating the challenges of identity formation, leading to a more positive resolution of the crisis.

4.3. James Marcia's Identity Statuses

While Erikson laid an identity resolution on the continuum between identity and role confusion, Marcia concluded that adolescents or young adults formed four qualitatively different identity statuses, which he defined based on whether or not their formation involved the stages of exploration and commitment[30].

At the exploration stage, adolescents 'put on' different social roles, test their capacities in new situations, and experiment with themselves and their environment to determine their abilities and preferences. In this process, they deepen their self-awareness and sometimes redefine their attitudes, beliefs, values, or social relations. At the commitment stage, adolescents are ready to make decisions about themselves and their actions and take on responsibility for their consequences. The plans, goals, values and beliefs they develop give a direction and meaning to their future lives[31].

The identity theory developed by James Marcia suggests that adolescents experience various identity statuses throughout adolescence. The timing of these statuses can differ from person to person, but the general process includes the following stages:

- *diffused identity*: individuals with this status have not yet committed to developing their own standards, values, or goals. They tend to exhibit inconsistent behaviours, often imitating those around them. This status is typically observed in early adolescence (around 12-14 years old), when young people have not yet begun exploring their identity or making significant life decisions;
- *foreclosed identity*: individuals in this status adopt behavioural patterns and ideologies from role models without critically examining them. They tend to idealise these models (whether groups or individuals) and adhere rigidly to their choices. This status may emerge in early to middle adolescence (around 14-16 years old) and is characterised by adopting an identity without prior exploration, often conforming to the expectations of parents or society;
- *moratorium identity*: those in the moratorium status are actively searching for their personal life path. They test themselves, challenge reality, explore new possibilities, frequently shift interests, and sometimes fluctuate between conflicting ideologies. This stage typically appears in middle to late adolescence (around 16-19 years old) and is marked by an ongoing exploration of various options without committing to a specific set of values or goals;
- *achieved identity*: individuals with this status have undergone a period of exploration and have come to understand who they want to be, what values they prioritise, and what worldview they hold. They are committed to their life plans and pursue them with consistency. This status is usually reached in late

30 Marcia, 1966, pp. 551–558.
31 Marcia, 1980, pp. 159–187.

adolescence or early adulthood (around 18-21 years old), when a person solidifies their identity by making long-term commitments.

These timeframes are approximate, as identity development is a personal process that progresses at different rates for different individuals.

Achieved identity enables satisfactory completion of early adulthood tasks. Only individuals who have developed a relatively stable and strong concept of their self and life can form relationships with other people without fearing for their independence and individuality. Having clear priorities and the motivation to accomplish them are a guarantee of their responsible and steadfast pursuit of life goals. This mature attitude increases their odds of having successful familial and professional lives in the future.

4.4. The Development of Self: Self-Determination and Autonomy

In contrast with children in middle childhood who tend to build their self-concept around the opinions of meaningful persons, adolescents begin to develop their own standards and assemble them into a system of references, which they use to compare their judgments with other people's opinions, whose importance steadily diminishes[32].

With the development of abstract thinking, the adolescent's self-knowledge becomes a source of information about who they are, resulting in the re-organisation of the knowledge they have accumulated thus far. External feedback, which once had the status of a final judgment, still plays a role, but rather as one out of a selection of factors to consider. It is notable that an adolescent's increasing ability to make self-judgments is not necessarily associated with their greater objectivity[33].

The perception of one's social self, i.e., the awareness of who we are for others, defining one's social relationships and position becomes important. The role of self-knowledge extends beyond its participation in behavioural self-regulation, because it is also engaged in seeking social groups or social roles worth identifying with, planning the future, or trying to control the course of events. As adolescents develop their ability to look further into the future[34], they start transforming their needs and motivations to align themselves with their long-term goals and revisit and modify their past experiences so that they correspond to their present-day self-image, sometimes with the help of defence mechanisms[35]. The vulnerability of adolescent emotions and feelings causes their self-image to be very volatile because they are uncertain about their bodies[36] and their attractiveness, as measured against prevalent standards[37].

32 Brzezińska, Ziółkowska and Appelt, 2019; Boyd and Bee, 2019.
33 See: Rzechowska, 2025, p. 216.: 3.2. Adolescent egocentrism: imagery audience and personal fable.
34 See: Rzechowska, 2025, p. 217.: 3.3. Non-cognitive consequences of the emergence of formal operational thinking.
35 See: Rzechowska, 2025, p. 193.: 5.1.1. Sigmund Freud's latency period.
36 See: Rzechowska, 2025, pp. 222-223.: 4.5. Gender identity formation and sexual orientation.
37 Boyd and Bee, 2019.

Among the various elements of identity, self-esteem is the most fragile and vulnerable to emotions. Its changes may have a bearing on an adolescent's relationships with their parents and peers.

In the adolescent years, teenagers advance from control by adults over their activities to partly autonomous activities, and finally gain full control over them. During the process, their consolidating and integrating attitudes are formed into worldviews, compliance with the expectations of others turns into independent decision-making and taking responsibility for their consequences, and wilful criticism gives way to openness to rational arguments.

4.5. Gender Identity Formation and Sexual Orientation

Gender identity formation begins with the identification to a particular gender manifested through behaviours specific to that gender, and ends with the identification to that gender's social roles[38].

The early signs of developing gender identity are observed in two year-old boys and girls, who begin to choose different toys to play with. Older children, aged 3-7 years, start noticing behavioural differences between genders. Sexual self-awareness and related gender identity become apparent in middle childhood. In the pre-adolescent years (10-12), boys and girls associate in separate groups where they have many opportunities to learn more about their and the other gender, about masculinity and femininity, and the differences between the genders. By the end of this period, boys and girls start dating in groups and organising mixed-gender meetings, which pave the way for romantic relationships and help adolescents acquire the ability to maintain them.

Pre-adolescence is the period when young people seek models to identify with, embrace mass culture and their peers' opinions, consolidate attitudes to their own and the other gender, show interest in sexuality, the sexual organs and their functions, and consider the differences between male and female maturation. These interests are intellectual and free of emotional engagement or sexual desires[39].

The course of maturation during which young people discover and explore sexuality is different between boys and girls. In boys, sexual curiosity concentrates on sensual experiences and opportunities for sexual contacts, whereas girls usually show more interest in the emotional aspects of romantic relationships.

Until around 17 years of age, psychological and social maturation lags behind sexual maturation. An adolescent's interest in the opposite sex and mixed-sex peer groups create opportunities for first-time friendships with erotic undertones, sexual initiations, and pre-intimate relationships. Mixed-sex peer groups also provide adolescents with feedback regarding their relationships. Their behaviour in the period of sexual maturation depends on what standards of sexuality they have adopted and how integrated their self-image is.

38 Steensma, 2013, pp. 288–297; Boyd and Bee, 2019; Oleszkowicz and Senejko, 2013.
39 Kar, Choudhury and Singh, 2015, pp. 70–74.

At around 18 years of age, the spheres of emotional character and sexual activity integrate, initiating the fast development of an adolescent's gender identity along their hierarchy of values, and influencing future sexual choices.

Insufficiently formed sexual identity may hinder the expression of one's sexuality. The stages of homosexual identity formation are well covered, *inter alia*, in the works by Vivienne Cass[40] and Susan R. McCarn and Ruth E. Fassinger[41], who conducted studies with boys and girls, respectively[42].

4.6. Abstract Principles and Values: Lawrence Kohlberg's Post-Conventional Phase of Moral Development

The second – conventional – phase of moral development involves gradually advancing acceptance and interiorisation of social norms and rules[43]. In the third, post-conventional phase[44], an individual's moral perspective is wider in the sense that judgments are made according to ethical principles of conduct, which may or may not be reflected in the law, rather than conventions or popular opinions. Morality is defined by abstract principles and universal rules guiding human behaviour.

In the fifth phase of moral development (social contract orientation), abstract reasoning is used to find moral grounds for potentially questionable decisions (stealing a drug for the sick wife is right because laws can be unjust, one has to consider all aspects of a situation, choosing life is right regardless of the law)[45]. As laws and rules are perceived in this phase as flexible tools intended to serve human purposes, it is admissible to reject them when they are inconsistent with individual rights and the interests of the majority and do not benefit people.

In the sixth phase (universal ethical principle orientation), the morality and appropriateness of decisions and actions is judged upon self-chosen ethical principles of conscience, which are abstract and universal in application. This type of judgment is formulated taking into consideration the perspectives of all individuals or groups that are likely to be affected by it (saving a human life is more important than an infringement on someone's property rights – the Heinz dilemma).

There are young people whose moral development never progresses to the post-conventional phase of moral development, just like not everyone attains the formal operational stage[46].

40 Cass, 2015.
41 McCarn and Fassinger, 1996, pp. 508–534.
42 See: Hall, Dawes and Plocek, 2021, pp. 1–19; Bandel and Wycisk, 2021, pp. 229–250; Długołęcka, 2005; Bancroft, 2011.
43 See: Rzechowska, 2025, pp. 195-196.: 5.2. Acceptance of social norms and rules: Lawrence.
44 Kohlberg, 1963, pp. 277–332.
45 Heinz dilemma.
46 Turner and Helms, 1995.

5. Relationships With Peers, Friendships and Romantic Relationships

Children's close bonds are by and large limited to the members of their families and friends. As they reach adolescence, they begin to build more enduring and deeper relationships with people outside their family settings. Now, closeness to friends and mates is enriched with a new category: closeness in romantic relationships.

5.1. The Role of Peers and Groups

Children's early relationships with their peers are motivated by a need for social interaction and practicing interpersonal skills[47]. For adolescents, relationships with the entire peer group defining their social self are more important[48].

The development of an adolescent through membership in a peer group largely depends on the degree to which he or she is accepted by the group, the group's rules, and their interiorisation by the adolescent. Peer groups usually establish their own culture with distinctive symbols, wear, behaviours, and communication patterns that all members must adhere to. Being part of a group's culture strengthens an adolescent's identity and sense of distinctiveness[49], as well as supporting them in becoming autonomous individuals.

Contacts with peers provide adolescents with opportunities to find out about their opinions, role models, and worldviews and to choose some for themselves from those consistent with the rules and values they were taught at home. Discussions and disputes with peers are also a training ground for expressing and defending views[50]. By interacting with other members of the peer group, adolescents expand their knowledge of themselves, other people and the world, become more self-accepting, experience closeness and support, and work out patterns of functioning in future close relationships[51]. Relationships with peers are therefore critical for an adolescent's development and enable them to establish a hierarchy of values, attitudes, interests, aspirations, and life plans.

Peer group membership gives many benefits to adolescents, such as greater self-esteem, a sense of security, shared interests, the acquisition of life skills, and an understanding of group solidarity. However, some can be double-edged. For instance, a sense of solidarity with group members may turn into a dislike towards outsiders, and high self-esteem may encourage audacious behaviour.

A peer group is not the equivalent of a family, but in some circumstances it can become its substitute. Adolescents' susceptibility to peers' influences depends on their personal traits and the nature of their relations with other family members.

47 Schaffer, 2004.
48 See: Rzechowska, 2025, pp. 221-222.: 4.4. The development of self: self-determination and autonomy.
49 Brown and Larsen, 2009, pp. 74–103; Obuchowska, 2004; Rubin, Bukowski and Laursen, 2009.
50 Obuchowska, 2006, pp. 163–201.
51 Hartup, 1992, pp. 175–205.

Their pursuit of new experiences and the readiness to follow peers contribute more strongly to their risky behaviours than each of the factors alone[52].

The norms adopted by a peer group usually override those promoted by adults when they come into conflict.

5.2. Friendship

Of the five overlapping stages in the development of friendship proposed by Robert Selman[53], two occur in adolescence[54]. These are:

5.2.1. Friendship as Intimate, Mutually Shared Relationships (9-15 years)

Friends in this age bracket exchange secrets they would not share with anyone else and help each other to solve problems. They are ready to compromise and exchange favours without "keeping a score," because they genuinely care about each other.

5.2.2. Friendship as Autonomous Interdependence (12+ years)

Adolescents aged 12 or older value trust, support and emotional closeness with friends. They are ready to accept and even appreciate differences between themselves and their friends. As they are less possessive than younger children, they tend to be less concerned over their friends' other relationships.

For adolescents who lack support and emotional closeness at home, even their first, immature friendships can help fulfil basic emotional needs and foster the development of relational skills and the ability to face challenges.

5.3. Adolescent Romantic Relationships

According to Harry S. Sullivan[55], the need for intimacy appears between the ages 9 and 12, when "a child begins to develop a real sensitivity to what matters to another person"[56]. In girls, an interest in boys and attempts to attract their attention appear when they are 12-14 old, at which age their male peers still pass time in the company of other boys and need two more years to take an interest in the opposite sex[57]. At this age, adolescents have a strong desire to be part of a popular 'gang', but the intensity of this need decreases as they grow older[58]. Same-sex peer groups, common in middle childhood, develop in adolescence into mixed-sex peer groups[59], whose members frequently become romantic partners[60]. Mixed-sex groups are friendly environments where young people learn to interact and help each other, as well as protecting them

52 Romer, Reyna and Satterthwaite, 2017, pp. 19–34.
53 Selman, 1980.
54 See: Rzechowska, 2025, p. 197.: 6.2. Children's friendship and the role of others.
55 Sullivan, 1953.
56 Way and Silverman, 2012, pp. 91–112.
57 Żebrowska, 1980.
58 Furman and Shaffer, 2003, pp. 3–22.
59 Dolgin, 2011.
60 Connolly, Furman and Konarski, 2000, pp. 1395–1408.

from premature sexual activity. Early romantic relationships are based on companionship and doing things together, and involve enchantment or fascination with the partner, who is frequently idealised[61].

Romantic relationships teach adolescents to express their needs and recognise their partner's expectations and desires, effectively communicate with a partner, cope with difficulties, etc. These skills enable them to deepen and stabilise their relationships, experience the intimacy of emotional closeness, and take responsibility for themselves and their partners[62].

Adolescent romantic relationships tend to be short-lived and uncommitted. Yet, their significance should not be ignored. They engage a lot of an adolescent's time and give them more positive and negative feelings than friendships, family relationships, or school life[63]. They also support adolescents in identity formation, influence relations with family members and peers, and enable emotional and behavioural adjustment.

6. The Role of Parents and Community During Adolescence

Maturation can be described as the time when young people redefine their dependence and independence in relation to parents, peers, society, and institutions, etc. Adolescents start to change as they become aware of various social and cultural expectations. They begin to rethink themselves in relation to others but also re-examine how others relate to them. Their newly established personal standards make them replace their authority figures with new ones[64]. New social and educational environments, meetings with new people, the Internet, films, television, literature, the arts, social media, etc. create new role models for them (e.g., influencers). Parents and teachers lose their status as authority figures, but can still influence the adolescent's choice of a role model.

Adolescence is a transition period between childhood and adulthood, meaning that adolescents are neither. Their needs are very similar to those that adults have, but the possibilities they have of satisfying them are limited. People expect them to behave as if they were adult but control their attempts at independence, which they believe is reserved for adults[65]. Finding their relations with the parents to be out-of-date, adolescents try to renegotiate and transform them, which often leads to conflicts and tensions when both parties have different perspectives on the family hierarchy shifts.

As they believe that their feelings and emotions are beyond an adult's understanding, adolescents attach less and less value to an adult's knowledge, criticise

61 Shulman and Kipnis, 2001, pp. 337–351.
62 Brzezińska and Piotrowski, 2010, pp. 265–274.
63 Furman and Shaffer, 2003, pp. 3–22.
64 See: Rzechowska, 2025, pp. 221-222.: 4.4. The development of self: self-determination and autonomy.
65 Bakiera, 2009.

their views, and question their authority. Quite naturally, they stop trusting adults and seek confidants among their peers. They protest when their parents interfere in their lives, restrain their emotions, reject signs of fondness, rarely ask for help and reluctantly accept it. At the same time, they test their parents in many ways to see if they accept, understand and support them and perceive parental boundaries as an expression of parents' concern[66]. An adolescent's changeable moods, attitudes, and emotional reactions are frequently perceived with ambivalence by their parents and make them feel inadequate and unnecessary. In many cases, adolescents are unaware of the causes of their behaviour.

Adolescents should be aware of what is expected of them and that their performance is consistently monitored[67]. When their goals seem to reflect wishful thinking and ignore the realities of life, parental supervision is necessary. However, it must be inconspicuous, arise from a genuine interest in the child's world, give the child as much freedom as is wise and rational given the child's needs, independence and autonomy, and communicate the strength of the parent's bond, trust, and acceptance of the child[68].

7. Difficulties and Disorders in Teenage Years

The ongoing social and cultural changes influence young peoples' experience of their daily lives. The biological, personality, and relational transformations taking place during adolescence make it a critical stage on the way to adulthood. The recent COVID-19 pandemic had even aggravated the disorders and difficulties experienced by adolescents. Emotional disorders can manifest themselves in many ways, including through:

- irrational fear and anxiety (over one's future, a relationship, health, etc.);
- depression impairing emotional functioning (low moods, irritability, anhedonia, a sense of guilt), cognitive functioning (attention focus problems, fatigability, pessimism, helplessness, negative perceptions of events), and behavioural functioning (withdrawal, sleepiness, having less interests, suicide attempts[69]);
- eating disorders associated with an overconcern with the body, appearance and a distorted self-image. Girls are more likely to develop anorexia (food restriction causing physiological and psychological disorders) and bulimia (episodes of binge eating followed by compensatory behaviours, such as self-induced vomiting or the use of laxatives), while boys are more likely to develop bigorexia, an obsession with having a muscular body, leading to intense exercising and the use of anabolic steroids;

66 Fuller, 2000.
67 Blum and Rinehart, 1997, pp. 37–50; Lee and Lok, 2012.
68 Olubiński, 2002.
69 Prinstein et al., 2019.

- risky behaviours and the use of drugs (usually marihuana), alcohol, and sex[70];
- self-harm and suicide attempts, usually provoked by depressive disorders[71].

Another group of problems observed among adolescents is related to cyberbullying[72], digital addictions (video games, compulsive scrolling, activity on social media, etc.), and juvenile delinquency[73].

The motivations for juvenile delinquency can include financial gain, a desire to impress others and gain acceptance, and a sense of impunity, among other factors. They are usually associated with the inability of the adolescent's family to meet his or her basic needs (due to family breakdown, parents abusing alcohol, etc.), poor school grades, or a desire to be accepted by an informal group, usually one representing some youth subculture[74]. The age limits exempting minors from criminal liability and the catalogues of offences vary internationally. In Poland[75], minors committing offences when younger than 17 years of age are not criminally prosecuted unless, (1) the offence involves heavy bodily harm, a gang rape, an incest rape, or any other specified criminal act and the offender turned 16, and (2) the offender is aged between 17 and 18 years. In the other cases, educational, therapeutic, or corrective measures are applied in lieu of criminal penalties.

Adolescence is the time when children developing into young adults experience many problems, whose impact can be intensified by their evolving cognitive and emotional spheres. Some adolescents will not develop self-control skills, emotional stability, or the ability to make rational judgments about acts, events, and their consequences. Because of an adolescent's desire to be accepted by others and their susceptibility to inspirations coming from individuals or groups they value, their guilt for the acts they commit is frequently difficult to measure. The fair consideration of charges against juvenile delinquents should, therefore, involve an evaluation of the level of their development and the degree to which their environments may have contributed to their wrongdoing.

8. Summary

Adolescents face numerous developmental tasks, including understanding their gender's roles, developing identity, gaining personal, emotional and social independence, redefining ties with the family, taking relationships with peers of both genders to a new, more mature level, becoming ready for a relationship, learning socially

70 Arnett, 1999, pp. 317–326.
71 Grzegorzewska, Cierpiałkowska and Borkowska, 2020.
72 See: Chapter 3, §7.1.
73 Odgers and Jensen, 2020, pp. 143–149.
74 Hołyst, 2001.
75 Kozłowska, 2011.

acceptable behaviours, and developing an attitude of responsibility[76]. All these tasks help adolescents find their place in society.

Sexual maturation in adolescence is an intense process involving hormonal alterations, the appearance of secondary sex characteristics, and structural and functional changes in the brain. Early and late maturation has different implications for boys and girls, including varying levels of parental control and expectations based on their perceived maturity.

The basis and precondition for changes in an adolescent's psyche is the development of formal operational thinking. Transitioning from concrete to formal thinking enables adolescents to think beyond the 'here and now', and abilities such as hypothetical thinking, combinatorial thinking with deductive or inductive reasoning, abstractive thinking, and metacognition appear. [77] With formal thinking, reflecting on oneself and others (analysing one's own and others' psychological states) becomes possible, paving the way for adolescent egocentrism (imaginary audience and personal fable[78]), criticism, philosophising, making life plans, etc.

During adolescence, the various aspects of identity participating in the construction of the individual and the social self integrate: the core components of identity are defined, second individuation takes place (Blos), and identity is formed (identity vs. role confusion crisis – Erikson) through different processes (there are four identity statuses**:** diffusion identity, foreclosed identity, moratorium identity, and achieved identity (Marcia). The emerging personal system of standards enables the reorganisation of an adolescent's self-knowledge, self-integration, and expansion of autonomy. Biological changes initiate the formation of gender identity. Some adolescents acquire the ability to regulate their behaviour using abstract principles and values (post-conventional phase of moral development[79]).

An adolescent's relationships with people other than their family members grows stronger and more enduring. A new type of closeness – romantic relationships – appears in addition to relationships with peers of both genders and advanced forms of friendship (friendship as an intimate, mutually shared relationship, and friendship as autonomous interdependence[80]).

In adolescence, young people revise their circle of authority figures to make room for new role models. Parents and teachers are less respected but can still influence an adolescent's choices of role models. As well as increasing demands on their parents to allow them more freedom and relax control over their lives, adolescents put them to various tests to see if they accept them and are ready to support them.

Adolescence can compound emotional and digital addictions affecting young people and increase their risk of becoming juvenile delinquents.

76 See: Havighurst, 1981; Brzezińska, Ziółkowska and Appelt, 2019.
77 Piaget, 1970.
78 Elkind,1967, pp. 1025–1034.
79 Kohlberg, 1963, pp. 277–332.
80 Selman, 1980.

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