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**Il ritiro sociale negli adolescenti italiani tra Nord e Sud: esplorazione
dei legami con regolazione emotiva, stile genitoriale e soddisfazione di
vita**

**Social withdrawal in Italian adolescents between the North and South:
exploration of the links with emotional regulation, parenting style, and life
satisfaction**

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*A chi è entrato nella mia vita e ha
reso questi due anni meravigliosi.*

*A chi ne è uscito, facendo spazio
a chi davvero merita di farne parte.*

*A chi, durante il mio percorso formativo,
mi ha trasmesso l'amore per la professione
psicologica, insegnato i valori di cui essa si
fa promotrice, e permesso di lavorare al suo
fianco per aiutare le persone che soffrono.*

*“Fu una batosta dura per me. Ma poi, che farci? Continuai la mia strada, in mezzo alle
trasformazioni del mondo, anch'io trasformandomi.”*

- Italo Calvino

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Introduction

Social contacts and interactions represent a fundamental aspect of people's life, as they are present in all development phases, from before birth to old age. The human brain is able to map relationships with others since the last trimester of pregnancy: a rather popular experiment by Partanen et al., (2013) demonstrated how newborn babies were able to recognize a lullaby that was sung to them by their mom when they were still in her belly. More evidence was provided by Castiello and colleagues' study on twin pregnancies (2010): this work documented how twins tend to move towards each other's bodies, seeking for physical contact and minding touching softly the most sensible body parts of their own little brother. It can be said that being in relationship with others is a fundamental need of the individual and nowadays, classic ways of spending time together in person are joined by the possibility of establishing virtual social bonds and maintaining contact with others without leaving home or having to share the same location. However, as much as we seem "wired to be social" (Castiello et al., 2010), some individuals can voluntarily start avoiding social interactions and contact with other people. This is the case, for instance, of those adolescents who, for various reasons, start to avoid peers, public places, and, in extreme situations, socially withdraw inside their houses, entirely cutting off their contacts with the outside world. Hence, this work had the primary aim of investigating social withdrawal in adolescents, comparing two groups of Italian students coming from the North and the South of the country and exploring ties with emotion regulation, parenting style and life satisfaction constructs. This aim is pursued by providing an explanatory framework of social withdrawal phenomenon and its extreme declination (Hikikomori), first in general terms, and then, more specifically, by analysing Northern and Southern Italian

teenagers' data, identifying risk factors and the impact of the Covid-19 pandemic on socially withdrawn adolescents: this part of the work is entirely presented in the first chapter. The second chapter will then illustrate the hypotheses formulated after the literature analysis that was carried out previously. The third chapter will focus on research design, while the fourth will be dedicated to results explanation and discussion. Lastly, the fifth chapter will present the conclusion, highlighting limitations of our study and future research on the topic.

Chapter 1

1. Social withdrawal among adolescents: a definition

Social withdrawal is a term referring to a complex phenomenon increasingly spreading among teenagers. If it initially was predominantly observed in Japan in the late Eighties, with young subjects becoming more and more isolated from society, hiding in the darkness and solitude of their bedrooms (condition known as “Hikikomori”), it is indeed noticeable that nowadays it has become a national mental health concern for economically developed countries. Social withdrawal could be defined as a voluntary progressive reduction of social interactions and frequentation of places involved with socialisation (schools, gym, parks etc.): self-isolation is obtained by displaying solitary behaviours such as shyness, avoidance of peer interaction, increase in time spent alone and engaging in solitary activities (Rubin et al., 2009). Social withdrawal is, as a matter of fact, problematic at all ages: albeit it appears to be particularly harmful in early adulthood and in such a delicate phase of life which is adolescence, since in both of these times of human development social interactions acquire significant importance (Barzeva, Meeus & Oldehinkel, 2019). However, social withdrawal does not express only by retiring in one’s own bedroom: according to Coplan and Armer (2007) there are three types of social withdrawal, based on the high or low presence of two variables, “social approach” (desire to stay close and spend time with others) and “social avoidance” (desire to avoid social interaction due to anxiety and preference for solitary activities):

1. Shyness (high approach, high avoidance);
2. Unsociability (low approach, low avoidance);

3. Social avoidance (low approach, high avoidance).

Moreover, a study (Li & Wong, 2015a) found three types of behaviour observed in social withdrawn teenagers, identifying three categories:

1. Asocials staying at home: this category refers to social withdrawn teenagers who have very few friendships, spend a great amount of time at home, playing videogames, watching television, reading books or manga. Their social and communication skills are low and even tend to decrease the more time is spent in isolation;

2. Asocial but going out: these adolescents tend to go out when necessary (e.g. paying a visit to a convenience store), but they do it when not too many people are around. Others might even leave their homes on a regular basis during the day, but spend their time alone, aimlessly roaming the streets;

3. Selectively social: some socially withdrawn teenagers may actually be able to communicate with people unconnected to their life or job, interact with family members, even take trips with friends, maintain digital social contacts.

Several authors debated whether or not to consider social withdrawal as an illness: a consistent group of experts seem to agree not to consider it a disorder. Tamaki Saito (2013), a Japanese psychiatrist who first used the term “Hikikomori” to refer to severe social isolation in Japan, sustained it could not be classified as a mental disorder or a personality disorder either, just an independent condition of retire. Anthropologist Carla

Ricci shares this opinion (2008), arguing that it's social isolation the cause for the development of psychopathology in Hikikomori population. Social withdrawal "is not an illness, but promotes illness" (Ricci, 2008, p. 27). Lastly, psychologist and Hikikomori expert Marco Crepaldi (2019a) asserted that it could be better defined as "social unease", clearly indicating adjustment difficulties of the subject to his environment, although not expressing a level of severity of the condition or assuming there is an underlying psychopathology at the base either.

Social withdrawal is perceived and lived differently across cultures: as an example, unfortunately Hikikomori subjects are frowned upon by Japanese people, and that's because of the characteristics of Japanese society, a collectivist system in which dependence from others is strongly promoted and the well-being and goals of the entire group are more important than those of the individual. In this society, the high pressure to work hard and the spasmodic pursuit of excellent performance at school pushes Japanese youth to withdraw, since it is common for them to experience fear of not living up to standards (Li & Wong, 2015b). However, if the group and contribution to society is that relevant, social withdrawing is thus seen as something that threatens the harmony and the well-being of the group (Bagnato, 2017): the fact that a healthy subject would voluntarily refuse communication and therefore society is perceived as unconceivable (Ricci, 2008; Saito, 2013). As far as individualistic cultures (such as Italian society) are concerned, some differences in the manifestation of the phenomenon must be considered. In Italy, less severe forms of isolation are observed: hybrid situations are the most common, such as teenagers still attending school but then retiring in their rooms, not taking part in any social activities, or subjects who quit school but maintain some type of contact with their families (e.g. sharing meals,

interacting with its members etc.) (Bagnato, 2017). Italian youths seem to feel less shame and sense of guilt when social isolating than their Japanese peers: as a matter of fact, they do not think they owe anything to society (Bagnato, 2017). Lastly, Italian mothers have shown to be less protective than Japanese mothers, as they try to discourage the self-reclusion behaviour (Bagnato, 2017). Despite the situation appearing less critical in our country, it is also true that Italian society applies an important pressure on youths, demanding to keep pace with the rapid transformations that have occurred in the past decades. The continuous change of reference points generates uncertainty, which instils confusion and insecurity in adolescents. These feelings, along with inability to deal with unpleasant emotions, may convince the teenager that he is incapable of fulfilling social expectations and push him to seek withdrawal as the sole solution to survive.

2. Hikikomori: the Japanese point of view

The term “Hikikomori” (translit. from Japanese: ひきこもり or 引きこも) was chosen by Japanese psychiatrist Tamaki Saito (2013) to describe a severe social withdrawal condition in which subjects (usually teenagers or young adults, ranging from 14-30 years of age) completely isolate themselves from social life and interaction (quitting school, work, relationships etc.) for a variable period of time (from months to even years), searching for solace in their houses’ bedrooms. Initially Hikikomori was thought to be a culture-specific phenomenon, but soon, as some authors have observed (Kato et al., 2018; Krieg & Dickie, 2013) more and more cases were registered in other nations, even those whose culture is profoundly diverse from the Japanese one: western countries such as the United States, the United Kingdom, France, Australia, and Spain.

In his essay (2019a), Crepaldi explains that Hikikomori was (and not very rarely, it still is) easily mistaken for other conditions, such as internet addiction, depression or social anxiety disorder, but it's important to highlight why it has to be treated as a different condition:

1. Internet Addiction: even if these phenomena are frequently observed coming together, it seems that Hikikomori and Internet Addiction both represent an independent condition one from the other. Crepaldi indeed reports: "Hikikomori's urge to isolate does not always depend exclusively from his attraction towards the internet, but always originates from a pre-existent condition of malaise" (Crepaldi, 2019a p.4). The internet is not responsible for the void a Hikikomori subject feels, but it becomes the filling that the isolated teenager chooses to soothe that feeling of void. Still, the Hikikomori phenomenon appeared long before the spread of the internet (it could be already observed in Japan in the late Eighties, while public access to World Wide Web only appeared in the Nineties). Moreover, Crepaldi thinks that use of internet should be seen as an opportunity because it allows to maintain contact, even if it's just digital, with external society and people. As a matter of fact, social competence is more preserved in Hikikomori subjects engaging in online activities rather than those who remain offline (Crepaldi, 2019a). In support of this, Park & Yap (2024) found that internet can sometimes even act as a bridge between the inside and outside world, allowing gradual reintegration into society. When evaluating the level of severity of isolation, digital contacts and friendships should be seen as positive factors since they keep the teenager connected with others (Crepaldi, 2019a). Those should be interpreted as good signs, showing a teenager that, despite clearly needing psychological intervention, is at least

preserved from psychotic drifts, maintaining a neurotic functioning asset on which is easier to work;

2. Depression: Hikikomori teenagers can exhibit symptoms of depression, but a consistent part of them doesn't meet the criteria for a diagnosis (Suwa & Suzuki, 2013). Hikikomori subjects isolate to avoid the suffering they feel when dealing with sociality, and to restore a sense of control and balance they couldn't maintain in the external society (Crepaldi, 2019a). Nevertheless, depression can be enhanced by isolation and it is not uncommon to find Hikikomori and mood disorders presenting together (Koyama et al., 2010);

3. Social Anxiety Disorder: in Hikikomori subjects there's some quote of social phobia, but it would be simplistic to treat them both as a single condition. In Social Anxiety Disorder subjects exhibit "marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others" (DSM-5, 2013); Hikikomori teenagers, instead, developed an extremely negative perspective towards social relations and society, that pushed them to willingly desire not to be a part of it anymore. An interesting study (Nagata et al., 2013) displayed that in a group of patients with Social Anxiety Disorder, those who had Hikikomori features showed more resistance to treatment than those who didn't. This probably occurred because Hikikomori subjects do not see social anxiety as an obstacle, but consider it as a warning that preserves them from social environment dangers.

In order to avoid further errors and confusion, Japanese Ministry of Health, Labour and

Welfare in 2003 established 5 criteria to identify Hikikomori subjects: (1) a lifestyle centred at home; (2) no interest or willingness to attend school or work; (3) at least 6 months of duration of the symptoms; (4) absence of schizophrenia, mental retardation or other mental disorders; (5) among those without interest or willingness to attend school or work, those who maintain personal relationships are excluded. Numerous authors (Saito, 2013; Tajan et al., 2017; Crepaldi, 2019a) tried to produce a profile of the Hikikomori subject: According to literature, they are mostly male, firstborns or only children, developing the condition between 15 and 19 years of age. As for the Italian context, two phases of life were identified as critical: the transition from middle to high school and post high school graduation. At a personal level, Hikikomori subjects are often intellectually gifted, introspective individuals, with a strong sense of shame that quickly turns into fear of being judged. Difficulties in establishing satisfying relationships with others, united with a sensation of diversity and incompatibility with peers, lead to mistrust and disinterest towards sociality. Ricci (2008) described common moods and behaviours among Japanese social withdrawn: restlessness, persistent sadness, obsessive-compulsive behaviours (ex. Obsession for body hygiene, body dysmorphia), day-night rhythm inversion (accompanied by sleep disorders), sense of inferiority due to personal inactivity as opposed to the operating of society, death thoughts and suicide planning (almost never executed though), violent behaviours (mostly domestic violence towards parents), age regressions. The Hikikomori seem also to follow a path that gradually takes individuals to self-reclusion (Dziesinski, 2003): (1) social pressure (school, family, career expectations); (2) trigger (e.g. bullying, school failure, embarrassment); (3) slow withdraw (progressive seclusion from outside contact); (4) parental collusion; (5) lack of institutional response (by ignoring the

problem or passing the buck to mental care); (6) years of isolation. Lastly, it seems relevant to report the four types of Hikikomori identified by French sociologist Maïa Fansten (2014, cited in Crepaldi, 2019a), based on the motivations that lead to the decision of withdrawing: (1) in the “alternative” type, withdrawal results from a sort of rebellion against the social system, perceived as oppressive and limiting personal liberty; (2) the “reactionary” type originates from a traumatic event that occurred at school or in the family; (3) in the “resigned” type, in an attempt to avoid social pressures and others’ expectations, they abandon social competition, giving up the pursue of any scholastic or work career; (4) the “cocoon-like” withdrawal is found when the subject rejects the responsibilities and duties of adult life, feeling not competent enough to handle them. It is important to notice that these four types are not to be considered as rigid, since in Hikikomori subjects it is possible to find one, multiple or all of these motivations at the base of withdrawal.

3. Prevalence

Data on prevalence of social withdrawal among teenagers is extremely heterogeneous. Ricci (2008) reports over a million cases in Japan (2% of youth, 1% of total population), 90% of them being firstborn males of medium-high social class. Other authors (Pozza, Coluccia, Kato et al., 2019) argue that epidemiological research shows significantly high variability, ranging from 0.87% to 1.2% of Japan, to 1.9% of Hong Kong, to 2.3% in Korea or up to 26.66% in student population in Japan. Further data (Bagnato, 2017; Caresta, 2018) indicates 1.5 million Hikikomori subjects in Japan, mostly males aged 18-27. The authors explain that they usually escape from the excessive pressures of the Japanese scholastic, working and social system; females instead (10%) seek isolation in

response to feelings of loneliness, since they experience little consideration and are relegated to a marginal role in society. Eckardt's study (2023) showed that in the United States 2.7% of the population had socially withdrawn from society, while general prevalence of social withdrawal in Europe was 2.01% (Amendola, Cerutti & Von Wyl, 2023), with higher rates in Southern Europe compared to Northern Europe (1.5% vs 0.8%). In Italy, social withdrawn teenagers are about 30000 (Bagnato, 2017), 0,42% of the youth population, primarily males, starting their reclusion at around 18 years of age and extending it for about 4-5 years. In the Italian context, it seems that only children or firstborns are not that more affected than other siblings, as social withdrawal symptoms appear regardless of filiation order. In conclusion, it is difficult to assess the prevalence of social withdrawal among the population due to the extreme variability of data. This heterogeneity could be explained by the use of distinct inclusion criteria, assessment methods across different countries. Other reasons (Lancini, 2019) could be the reticence of families to report their child's problems or the limited knowledge of the phenomenon, often mistaken for psychopathologies or other conditions.

4. Interpretative Framework

In order to achieve a correct understanding of social withdrawal and why adolescence is such a risky phase of life for the emerging of social withdrawal symptoms, it is necessary to take a look at developmental tasks the adolescents are required to complete. Teenagers find themselves in a phase of life characterized by physical, psychological, social and relational changes. First and foremost, transformation of the body is one of the first aspects determining the end of childhood: the gradual loss of its early juvenile characteristics to become, at the end of the process, renewed, mature, and

sexual. The adolescent is hence required to integrate this new body image in his representation of self. These changes are disharmonious and rapid, therefore it is not uncommon for the body to become object of manipulation or attacks (e.g. Self-harming, suicide attempts, eating disorders), as a display of rejection. In this sense, regarding the topic that's being discussed, social withdrawal and consequent seeking shelter at home and in the internet could be seen as a rejection of the body, carefully hidden behind a room's door, away from other people's gaze and scrutiny. These adolescents often permanently replace their self-image with avatars, images of non-real characters, burying their real body, perceived as nasty and inadequate, becoming invisible and disappearing from the social scene (Buday, 2019).

The adolescent is also engaged in the delicate task of building his identity, becoming progressively more aware of his individuality. It is true that children already can declare their identity basing on more evident and concrete aspects they learn about themselves, but it is from adolescence onwards that identity takes on profound affective meanings linked to knowledge and awareness of self as a subject in relation (Buday, 2019). What is important in this process is the possibility to confront and interact with others, promoting growth of self: it is now not difficult to understand how this growth is denied to subjects who decide to withdraw from social life. Moreover, the distorted use of internet allows socially withdrawn teenagers, whom usually have a negative self-image, to take on virtual identities and personalities, which are completely different from those they possess in real life (Bagnato, 2017). In that way, virtual social interactions and relationships determine low levels of anxiety since they are anonymous and users can hide behind false identities, generating a sense of security.

Another important matter in adolescence is separation-individuation process, namely

the renegotiation of the relationship with members of family. The teenager temporarily distances himself from family and is driven to seek closeness to peers and extra-familial models (coaches, teachers, etc.) on whom he can count. However, socially withdrawn adolescents quit this developmental task: in their families, characterized by an absent or weakly present father figure, there is an imbalance in the parent-child relationship in favour of the mother, who establishes a bond of symbiotic dependence with the child (Crepaldi, 2019a). Therefore, there's a condition in which, on one side, the son takes advantage of overprotection and maternal care because he feels entitled to, due to his status of withdrawn; on the other, the excess of protection and intrusiveness makes the subject feel oppressed, to which oppression he responds with aggression (Crepaldi, 2019a). Other possible origins of social withdrawal could be pressure for social achievement (particularly strong in Japan, but increasingly growing in all modern societies), fear of judgment (specifically, fear of failure and not living up to other people's expectations) and shame, existential depression and apathy (Crepaldi, 2019a). Pietropolli Charmet (2013) argues that socially withdrawn teenagers struggle with narcissistic fragility as a result of the magnificent and grandiose image of self which was so nurtured during childhood. The outcome is an opposition between a highly ambitious ideal and inability to deal with disappointment and failure. In conclusion, the framing of such a complex phenomenon such as social withdrawal requires taking into account adolescence as a phase of life and understanding of how it is characterized in current times. Succeeding at completing developmental tasks of adolescence means experimenting oneself outside the familiar context, debuting in the world of peers and dealing with the weaknesses and the limitations of the self (Andorno & Lancini, 2019). It seems that social withdrawal in adolescence tends to appear as a result of difficulties

in these areas, especially regarding the ability to tolerate the shame of possible failure, and that this is the main reason that pushes adolescents to disinvest in school, relationships, growth and their future prospects (Andorno & Lancini, 2019). Staying away from others allows socially withdrawn subjects to escape judgement from peers and avoid experiencing unpleasant emotions, thus making self-reclusion a new way of expressing juvenile unease.

5. Risk Factors

Several variables have been associated with a higher risk of social withdrawal. Risk factors for social withdrawal behaviour can be divided in contextual and individual factors.

5.1 Contextual factors

Among contextual risk factors the influence of society, school and family on individuals must be considered, since most of adaptive and maladaptive behaviours start and consolidate in these contexts. The tendency to repression of individuality and to consider individuals not as single units but always as parts of a group, typical feature of collectivist societies, represents a first relevant risk factor for social withdrawal (Bagnato, 2017). As a matter of fact, on one side, stepping out of the assigned social role and feeling different from others automatically determines exclusion from the belonging group; on the other, the individual itself usually withdraws because he does not think he has enough skills to successfully accomplish what is socially required of him. In individualistic societies, increasingly hectic paces of life, along with pressures to meet high and changing standards in a short time, can lead subjects to face hardship

in tolerating uncertainty, to feel their personal aspirations suppressed and to withdraw as a response to high levels of stress (Bagnato, 2017).

As long as family is concerned, it is well known today the power of family dynamics to produce and enhance or to prevent and diminish the extent of unease. An authoritative parenting style is known to be the best for the child's development because it presents high levels of commitment and family warmth combined with the promotion of the child's autonomy in an age-appropriate manner (Baumrind, 1971). It seems that an overprotective and excessively nurturing parenting style represents an important risk factor for social withdrawal. This link with withdrawal behaviours becomes evident very early in a child's life: in fact, at preschool age already, withdrawn or socially inhibited children have usually excessively protective, unsupportive mothers, who do little to encourage personal initiatives and autonomy in activities (Hastings et al., 2010). Moreover, in a study with 4-year-old children (Rubin, Cheah & Fox, 2010) mother-child interactions were evaluated in a free-play context and during the performance of a rather difficult task for the child's age. Children whose mothers were overly solicitous in the free play context appeared more inhibited and reticent in interaction with peers; contrarily, mothers who showed similar behavioural patterns in both tasks had less reticent children. Plus, an interesting study conducted by Lin and colleagues (2020) investigated how two components of parenting, psychological control and parental knowledge, could transactionally interact with social withdrawal in adolescence. The authors defined "psychological control" as the parents' attempt to influence their child's thoughts and emotions through strategies such as love withdrawal, shaming, devaluation and guilt-induction; they then defined "parental knowledge" as "parents' awareness about their child's whereabouts, activities and friends (Lin et al., 2020). The influence

of these two components was indeed confirmed: more specifically, a negative cascade pattern was found, in which early social withdrawal predicted a subsequent greater psychological control by parents, which in turn predicted an increase in social withdrawal, and so on (Lin et al., 2020). Furthermore, a decrease in parental knowledge was also observed, as the adolescent's social withdrawal increased (Lin et al., 2020). Another relevant familiar risk factor is parent's personality: traits such as neuroticism and anxious tendencies push parents to exhibit more negative affect in parenting, undermining their children's sense of security (Hastings et al., 2010). Certain parental beliefs, such as thinking their child's shyness is a stable trait of his personality (Rubin & Mills, 1992) that cannot be changed in any way or even perceiving him as the sole responsible of his withdrawal behaviour, represent significant risk factors for the maintenance and aggravation of social withdrawal. Other familiar risk factors detected by other authors are low levels of adaptability (assumption of rigid and fixed roles by family members) and familiar cohesion (Suwa, Suzuki et al., 2003), absence of an extended family support, death of a family member, dysfunctional family dynamics (Li & Wong, 2015a), single-parent families, family psychiatric history and family maltreatment (Malagòn-Amor et al., 2020).

Lastly, school represents a context that must be considered for the importance it gains in becoming a first terrain in which an inventory of social skills can be built and experimented by the child in a safe environment before applying them in everyday life. Often high academic pressures and competition have been associated with social withdrawal in adolescence (Crepaldi, 2019a; Honjo, 1992; Li & Wong, 2015b), especially when teenagers need to deal with school failure. Besides, school demands students to establish good relationships with classmates and teachers; in other words,

what has been called a good school adaptation. A bad school adaptation instead can easily produce school refusal, which is identified as the most common among conditions that determine isolation (Honjo et al., 1992). “School refusal” is used to refer to a conduct characterized by scarce or absent motivation to attend school (frequent absences from school, strong physical resistance to go to and attend classes etc.) that lead over time to poor academic performance, decrease in commitment to activities and interests, social interaction problems and withdrawal (Bagnato, 2015). Lastly, as some authors found (Li & Wong, 2015a; Beccaria et al., 2022), bullying too plays a role in the development of social withdrawal, as it makes teenagers resentful and distrustful towards their peers.

5.2 Individual Factors

Numerous individual risk factors have been associated with higher risk of social withdrawal. Presence of dysfunctional thoughts is definitely related to voluntary isolation. Bagnato (2017) identifies different types:

- Excessive demands on oneself: those include wishing at all cost for things to run exactly as one’s expectations and refusal of failures. Strictness inevitably produces unpleasant emotional states such as anger, frustration and discouragement;
- Catastrophization/Generalization: thoughts like “Everything will go wrong”, “It went wrong once, it will go wrong always and in other contexts too” are rather common;
- Self-devaluation: thinking one’s incompetent leads the person to little efforts and

scarce commitment to make things change (learned helplessness).

Some authors (Rubin & Burgess, 2001) found that a fearful temperament and high levels of anxiety are strongly related to development of social withdrawal. More specifically, anxiety and withdrawal, authors sustain, have a dialectical and cyclical relationship: when the teenager feels (social) anxiety, withdrawing from the context can give relief and reduce the state of arousal, thus reinforcing the withdrawal behaviour. Nevertheless, avoidance reduces the adolescent's coping and social skills, determining a higher level of arousal whenever he has to interact with peers, pushing him into withdrawal again (Rubin & Burgess, 2001). Hu (2024) provides further evidence, highlighting a negative correlation between shyness and the individuals' interpersonal skills and assertiveness: as a matter of fact, in the study, individuals with a high dimension of shyness were also more likely to display asocial behaviours and less likely to initiate or respond to peer interaction, contributing to peer exclusion and aggravating social withdrawal (Hu, 2024). This study also reports meaningful information about the role of a secure/insecure attachment in the development of social withdrawal symptoms: while securely attached adolescents are more inclined to exhibit positive social behaviours, insecurely attached individuals tend to display avoidant, anxious, or conflictual behaviours during social interactions, leading to withdrawal from social settings (Hu, 2024). In support of this, Krieg & Dickie (2013) found higher incidence of anxious-ambivalent attachment in their Hikikomori sample rather than the control group of non-Hikikomori subjects. Moving forward with the investigation of individual risk factors, an internal attributional style also has been associated with development of social withdrawal (Rubin & Chronis-Tuscano, 2021). In fact, socially withdrawn

children, unlike non-withdrawn peers, tend to interpret their social failures as resulting from internal, stable causes. Therefore, these children start to believe that social failure is dispositionally determined and hence that they are not suited for successful social interactions (Rubin & Chronis-Tuscano, 2021). It is also important to consider the role of emotion recognition and regulation: Bagnato (2017) noticed how among youths it is very common to display dysfunctional behaviours towards situation perceived as complex and problematic. According to Goleman (1996, cited in Bagnato, 2017), this could derive from what he called “emotional illiteracy”, namely a lack of ability in young people to comprehend, express and manage one’s own emotions, combined with poor empathy towards others’ emotions. As a matter of fact, Goleman asserted that young people usually think they do not have any sort of control on emotional expression, lacking functional strategies for coping with problems. (Goleman 1996, cited in Bagnato, 2017). If everything that was said is true for youths in general, the situation is even more serious when speaking about social withdrawn teenagers. In fact, generally, social withdrawn subjects display difficulties in managing their emotions and are quite poor at communicating their feelings (Iannattone, Miscioscia et al., 2021). This inability to ask for help could induce these adolescents to think that withdrawal and self-exclusion from social interaction are the only strategies available to soothe their underlying discomfort (Iannattone, Miscioscia et al., 2021). Further information is obtained when looking at Frankova’s study (2019): the researcher formed three different groups, the first consisted of primary Hikikomori subjects (those whose main condition was social withdrawal, not suffering from any psychiatric disorder), the second of secondary Hikikomori subjects (those who were withdrawn and had a psychiatric disorder) and the third of non-withdrawn controls. She then compared the level of

alexithymia and the ability to recognize and verbalize emotions in all three groups: results revealed that the highest levels of alexithymia were found in the primary Hikikomori group, followed by the secondary Hikikomori group and finally the control group, which scored the lowest (Frankova, 2019); for the ability to recognize and verbalize emotions, the control group performed significantly better than both Hikikomori groups, while again the worst scores were obtained by the primary Hikikomori group (Frankova, 2019). Lastly, Hikikomori groups even had higher hostility and physical and verbal aggressiveness indexes than controls (Frankova, 2019), in agreement with what was described by other authors (Bagnato, 2017; Ricci, 2008). Another important factor to be considered is life satisfaction: Um's study (2024) found that social withdrawal and life satisfaction are negatively correlated, while Clair, Gordon and colleagues' work (2021) reported that higher social isolation also indicated less connection to community and lower life satisfaction, in both functional and social domains. However perhaps the most interesting results came from the study conducted by Kekkonen, Tolmunen and colleagues (2020), who found that low social interactions and loneliness in adolescence predicted a low life satisfaction in early adulthood: this was particularly true for males rather than females (Kekkonen, Tolmunen et al., 2020). Finally, other authors report perfectionism (Crepaldi, 2019a), low levels of self-esteem (Hamasaki, Pionniè-Dax, Dorard et al., 2021; Rubin et al., 2009), misuse of social media (Hu, 2024), poor self-efficacy (Bagnato, 2017), infant behavioural inhibition (Verhagen, Derks, Roelofs & Maciejewski, 2023), and dysfunctional coping strategies (Bonnaire & Roignot, 2023) as highly related to development of social withdrawal.

6. Covid-19 pandemic's impact

COVID-19 pandemic started in China in 2019, rapidly spreading worldwide and forcing world leaders to apply measures, such as social distancing and quarantine, in an attempt to control the number of infections. Nowadays, as 5 years have passed since the first case, it is well known the negative impact the pandemic had on people's well-being worldwide, stirring global feelings of anxiety and depression and increasing mental health problems (Esterwood & Saeed, 2020). If COVID-19 had a significant negative impact on general population, it is reasonable to think that groups of people who were already fragile before the outbreak began (as socially withdrawn subjects are) were even more struck by those negative effects. As expected, scientific literature confirmed the worsening of mental health among social withdrawn subjects, with a marked increase in anxiety and depression symptoms and perceived subjective stress (Ogawa et al., 2023). Resuming Coplan and Armer's different types of social withdrawal (2007), Xu and colleagues (2022), in their study, analysed the impact of the pandemic on subjects who fall into each these categories and found there were distinct mental health trajectories: social-avoidant people had the worst outcome, showing lower levels of well-being across the pandemic, followed by unsociable subjects and lastly shy subjects, whose mental health (still worse than non-withdrawn control group) remained stable throughout the phases of the outbreak (Xu et al., 2022). Furthermore, not only COVID-19 worsened mental health and aggravated pre-existent conditions of withdrawal, but it also could have played a role in increasing the number of social withdrawn subjects (Cruz, Sousa et al., 2023). As a matter of fact, when lockdown was imposed, people who were at first only at risk experimented social reclusion for at least 3 months, which is usually the duration of the pre-Hikikomori stage. Once the lockdown phase ended,

these subjects struggled to return to their previous life: in many cases, the return to their pre-COVID life was voluntarily refused (Rooksby, Furuhashi & McLeod, 2020).

Teenagers were equally highly impacted, as pointed out by Windarwati and colleagues' review (2022), especially high schoolers rather than middle schoolers. The authors indeed reported higher stress reactions such as feeling sad, angry, strained, withdrawn, presence of depression, PTSD symptoms, sleep problems, difficulties or cognitive/attention disorders (Windarwati et al., 2022). Moreover, teenagers complained about decreased motivation and creativity, reduction of social interaction and more family conflict (Windarwati et al., 2022). Lastly, adolescents experienced high levels of loneliness, not being able to engage in outdoor activities or meeting with their friends, increasing their fear of losing closeness with them. However, not everything turned out to be negative: Despite not being able to meet face-to-face with their friends, most teenagers kept social contacts through social media, videogames or chatting (Esposito et al., 2021; Kerekes et al., 2021). Furthermore, if it is true that many teenagers had sleep problems, it is also noticeable that a part of them seemed to benefit from lockdown, since life paces slowed, allowing them to sleep and rest more and better (Windarwati et al., 2022). In conclusion, it seems appropriate to report Wong's observation on a potential positive outcome for social withdrawn subjects resulting from the pandemic (2020). As the author sustains, since people have experienced months of social distancing and forced lockdown, an increasing understanding of the social withdrawal condition could have developed, allowing people to empathize more with young social withdrawal. This aspect represents an important step forward towards destigmatization of Hikikomori, especially in Japanese society where, as previously discussed, social withdrawal is perceived as a threat for the community.

7. Italian context: North versus South

For the Italian context, some aspects of social withdrawal have already been discussed, such as its similarities with the Japanese counterpart regarding the presence of shame and school phobia, and aspects of divergence (inferior duration and severity of withdrawal, less sense of guilt towards society, parents more willing to seek help and less prone to indulge their children's condition) (Bagnato, 2017). However, as we dive deep into the Italian reality, differences between the manifestation of social withdrawal in the North and the South part of the country are quite noticeable, two sides in which a gap in life conditions, cultural values and daily habits has always existed. Northern Italy is characterized by a highly developed economic-productive system and an excellent level of social and individual well-being, while the South of the country is weaker and less organized at an economic, social and cultural level. Several studies and authors have investigated social withdrawal in Italy (Bagnato, 2017; Crepaldi, 2019, 2023; Lancini, 2019), unfortunately there are not much data in literature on differences between the two parts of the country, and when there are, they are not that reliable or get to similar conclusions either. As a matter of fact, keeping in mind that social withdrawal is typical of rich and industrialized societies, a major presence in Northern Italy rather than Southern Italy could be hypothesized. Nevertheless, Bagnato (2017) reports that Hikikomori is well-present in South Italy, even when the socio-economic status is low. The author also shows how episodes of physical violence happen mostly in the South: for this aspect, it seems that southern Hikikomori subjects resemble more their Japanese peers, living the same dependence-autonomy dichotomy and having more protective indulgent mothers compared to Northern teenagers' moms (Bagnato, 2017). A survey by Esposito and colleagues (2023) conducted in Campania region contrasts

with Bagnato's family data, reporting (in line with international literature) that Hikikomori's families have a high socio-economic and cultural level. Furthermore, Italian Ministry of Education, University and Research (MIUR)'s findings in Emilia Romagna region (2019) signal a higher number of female social withdrawal than male, in contrast to all data reported so far: the same result emerges from Italian National Institute of Health (ISS) in their report ISTISAN 23-25 (2023). Another study from the Institute of Clinical Physiology of the National Research Council of Pisa (CNR-IFC) (2023) found that the number of social withdrawal subjects seems to be higher in the South than in the North, but Crepaldi (2023) raised numerous doubts about the actual validity of the presented data: the author sustained that the CNR study presents several critical issues, including a possible overlap with the phenomenon of school dropout, lack of clarity on the causes of isolation and on the definition of "significant" isolation, the interference of COVID-19 pandemic (the study was conducted in 2020). However, the biggest limit is definitely the fact that the study was carried out on those still attending school, leaving out all the boys and girls who had already dropped out (a problem that Crepaldi also found in the ISS study). Two researches that involved already retired subjects are those conducted by Crepaldi on parents of withdrawn teenagers (2019b) and on withdrawn adolescents themselves (Crepaldi, 2019b, as cited in Crepaldi 2019a). In the first one, the author confirms the higher prevalence of Hikikomori in male, firstborn (as Saito and other authors had already identified) subjects, coming from wealthy families with a mid to high socio-cultural level; almost all Italian regions are represented, but there's a neat prevalence of Northern Italian parents over Southern Italian ones. The second study is statistically less representative of the population, as less answers were registered, but overall the data is similar to the

study on parents, with the exception of perceived parent-son relationship (judged more negatively by teenagers) and the possibility of receiving aid (parents believed their sons would not accept to be helped, while they actually wanted to) (Crepaldi, 2019a).

However, these researches are not immune to issues: in the study with parents, fathers were underrepresented; plus, only parents members of the association “Hikikomori Italia” answered the survey, and this could have played a role for some variables (e.g. perception of the relationship with their sons, found to be quite positive); lastly, the survey, delivered in a digital form, naturally only reached highly digitalized families, and this could explain a lower presence of responders from the South and Italian Islands. Despite these conflicting data, there seems to be more agreement when it comes to Italian teachers’ thoughts and behaviours towards social withdrawal: in fact, several articles report how they are generally aware of the problem and become concerned when their students do not attend classes anymore (Ranieri et al., 2015; Concina, Frate & Biasutti, 2024), seeking a telephone contact with parents or with the student himself. These reach outs become more frequent as the length of the period of absence from school increases (CNR-IFC, 2023). In conclusion, social withdrawal in Italy is a problem that should not be underestimated. Current available data is definitely not sufficient, because most samples are not enough representative of the population and studies often contradict each other, being weak and with great limitations and issues: for these reasons, it is difficult to establish whether social withdrawal is a more Northern or Southern phenomenon (or if it is equally distributed). That is why it is necessary, in the years to come, for studies to grow significantly in number, but most importantly, to become more accurate and adequately representative of the whole Italian population.

Chapter 2

1. Aims and hypotheses

Aims and hypotheses are derived from the previous literature review in Chapter 1.

1.1 Aims

1) Exploration of risk factors for social withdrawal, level of emotion regulation, features of parenting styles and life satisfaction in a sample of 300 adolescents in Italy and, more specifically, differences (if there are any) between the North and the South of the country.

1.2 Hypotheses

Hp1) As mentioned in the previous chapter, Italian data on adolescent social withdrawal often show inconsistencies, with studies sometimes contradicting one another. Crepaldi (2023) points out several limitations, including samples that are not always representative of the population (e.g. fewer fathers compared to mothers, or a higher number of participants from the North than the South). Additionally, studies such as those by ISS (2023) and CNR-IFC (2023) exclude students who have already dropped out of school, making it challenging to develop a clear hypothesis. Given these issues, an exploratory approach was chosen to assess the risk of social withdrawal among adolescents in Northern and Southern Italy.

Hp2) When it comes to parenting style, literature pointed out how it is able to affect social withdrawal behaviours: an excessively nurturing parenting style, even when

children/adolescents do not need that aid, weakens their self-esteem and turns them into needy, dependent, fearful and, consequently, retired individuals (Hastings et al., 2010; Rubin, Cheah & Fox, 2010). This attitude can lead to the development of an anxious-ambivalent attachment that negatively affects social interactions, fuelling anxiety and avoidant behaviours that ultimately turn into social withdrawal (Hu, 2024; Krieg & Dickie, 2013). Moreover, as highlighted by Lin and colleagues' cascade model (2020), a vicious circle could be triggered when an increase in parents' psychological control strategies (perhaps in an attempt to tame early signs of withdrawal) is followed by an increase of the adolescent's social withdrawal, to which parents react with even more control, triggering more withdrawal and so on. Other parenting style factors influencing social withdrawal are excessive criticism and lack of supportiveness (Hu, 2024). Given the scientific evidence and considering what Bagnato (2017) said on southern Italian teenagers about their high dependence from their mother and the overly indulgent and protective attitude of the latter (significantly more than northern mothers), it was considered appropriate to hypothesize that north Italian parents could have a more effective parenting style than southern Italian parents.

Hp3) Social withdrawn subjects face significant difficulties when dealing with emotion expression and regulation. Their inability to cope with unpleasant emotions and to regulate them is well documented (Bagnato, 2017), appearing very depressed, sad and incapable of accessing thoughts of hope or, on the opposite end, aggressive prone to violent behaviours (Ricci, 2008). Another difficulty is the fact that in many cases socially withdrawn adolescents are unable to recognize their emotions, lacking emotional clarity (Frankova, 2019; Iannattone, Miscioscia et al., 2021). Recovering

Bagnato's data (2017) on higher number of aggression episodes in the South rather than the North, a greater difficulty in emotion regulation in southern adolescents than northern was hypothesized.

Hp4) Literature reports that life satisfaction in withdrawn adolescents is lower than in non-withdrawn peers (Um, 2024). Other authors (Kekkonen, Tolmunen et al., 2020) found that a lower presence of social interactions in adolescence is associated with a worse quality of life and life satisfaction. More evidence in support of this are given by Clair, Gordon et al., (2021), who found a positive correlation between high levels of social withdrawal and low life satisfaction in functional and social domains, and by Cacioppo & Cacioppo (2014), who reported that social isolation not only damages psychological well-being, but also leads to physical health problems and a lower life expectancy. Lastly, a low life satisfaction correlates with absenteeism and school dropout (Inoue, Kato & Yorifuji, 2018). Considering scientific evidence and what was said about social and individual well-being levels in Italy (Bagnato, 2017), expectations are to find higher life satisfaction in northern teenagers rather than southern.

Chapter 3

1. Research

1.1 Procedure

The study was approved by University of Padova's psychology ethics committee (n. 5315; April 7th 2023) and took place in several schools on Italian territory. Two different informed consent forms were produced, one for underage students, (whose both parents' consent was required to participate), and one for students aged 18 or older (who could give their consent in autonomy). In both forms, the study's aims and procedure for participation were accurately exposed. Denial of consent by parents or by the adolescent himself or failure to return the consent form completed and signed in all its parts to the researchers resulted in exclusion from participation in the study.

Furthermore, students were informed that participation was voluntary, that omission of answers they did not want to give was permitted and that they could withdraw from completing it at any time without the need to provide any explanation.

The survey was administered through the Qualtrics survey software and was composed of 15 questionnaires that investigated respectively the constructs of social withdrawal and loneliness (Hikikomori Risk Inventory, HRI; Loscalzo, Nannicini et al., 2020), (Hikikomori Questionnaire, HQ; Teo, Chen et al., 2018), behavioural inhibition (Behavioural Inhibition Questionnaire, BIQ; Bishop et al., 2003) and self-control (Brief Self Control Scale, BSCS; Tangney et al., 2004), anxiety and depression symptoms (Strengths and Difficulties Questionnaire, SDQ; Goodman, 1997), emotion regulation (Difficulties in Emotion Regulation Scale Short-Form, DERS-SF; Kaufman et al., 2016)

and aggressiveness (Reactive-Proactive Aggression Questionnaire, RPQ; Raine et al., 2006), self-esteem (Rosenberg Self-Esteem Scale, RSES; Rosenberg, 1965), life satisfaction (Satisfaction with Life Scale, SWLS; Diener, Emmons et al., 1985) and psychological well-being, perception of importance in relationships regarding self-esteem, purpose, and optimism (Meaning in Life Questionnaire, MLQ; Steger et al., 2006), (Flourishing Scale, FS; Diener et al., 2010), personality traits (Big Five Questionnaire for Children, BFQ-C; Barbaranelli et al., 2003), internet use (Internet Disorder Scale, IDS-15; Pontes & Griffiths, 2017), maternal and paternal parenting styles (Parenting Style Inventory, PSI-II; Darling & Toyokawa, 1997) and attachment (Inventory of Parent and Peer Attachment, IPPA; Armsden and Greenberg, 1987). Data collection was carried out confidentially by the assignment of a unique and anonymous code to each student: if they wished to, parents (or the student themselves if 18 or older) could request feedback and a return of their child's raw data, upon presentation of the code that had been assigned at the time of administration. After the necessary statistical analyses had been carried out, a feedback meeting was held, in which, in presence of the school headmaster, parents and teachers, overall results were presented in an aggregate form and the psychological well-being of the students was discussed, opening a discussion about psychological well-being of adolescents.

1.2 Sample

The sample as a whole consisted of more than 3000 subjects, from which a smaller sample of 300 subjects, equally distributed for gender and provenience (Northern and Southern Italy) was randomly extracted. The subjects' age varied from 13 to 19 (Mean = 15.68; sd = 1.34), with the majority of responders being 15 years old (33%), and are

mostly Italian (94%). The distribution by school year shows that 19% attended the first year of high school, 29.3% the second year, 26% the third, 16.7% the fourth, and 9% the fifth. Regarding the type of school, 41.7% attended an “ITIS” (the Italian equivalent of British “technical schools”), 49% attended a “liceo” (the Italian equivalent of British “Grammar schools”), while only 9.3% attended vocational schools. Taking a look at family composition, it is revealed that 83.3% of participants had at least one sibling. Parents’ educational levels varied, with the majority of mothers (47.7%) and fathers (46%) having a high school diploma. Parents’ occupation data showed that 28.3% of mothers are employees, while 21.3% and 21% of fathers are respectively employees and workers. The complete information relating to the socio-demographics of the sample is shown in Table 1 and Table 2 at the end of the chapter.

1.3 Tools

A total of 15 questionnaires was administered to students, of which, to test the hypotheses of this work, four were considered:

a) Hikikomori Risk Inventory (HRI-24; Loscalzo, Nannicini et al., 2020): this self-report scale measures the risk of developing severe social withdrawal. It is made of 24 items organized in five subscales (Anthropophobia, Agoraphobia, Paranoia, Lethargy and Depressive Mood). Respondents answer using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Once completed, a total score of Hikikomori risk is obtained. For this scale, the higher the score, the higher the risk of developing severe social withdrawal;

b) Difficulties In Emotion Regulation Scale – Short Form (DERS-SF; Kaufman et al., 2016): this 36-item instrument measures emotion regulation problems. Responders are asked about how they relate to their emotions, choosing the answer that best suits them on a five-point Likert scale ranging from “almost never” to “almost always”. The answers produce scores on six subscales, which are (1) Non-acceptance of emotional responses; (2) Difficulty engaging in goal-directed behaviour; (3) Impulse control difficulties; (4) Lack of emotional awareness; (5) Limited access to emotion regulation strategies; (6) Lack of emotional clarity. Higher scores in the scales suggest more severe emotional regulation problems;

c) Parenting Style Inventory (PSI-II; Darling & Toyokawa, 1997): this instrument was used to assess three dimensions of maternal and paternal parenting styles: (1) Responsiveness (presence of emotional warmth and support), (2) Demandingness (claims that parents make on their children), (3) Autonomy-granting (level of control/autonomy in the parent-child relationship). Questions are rated on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree);

d) Satisfaction With Life Scale (SWLS; Diener, Emmons et al., 1985): this is a short 5-item tool that measures global cognitive judgements of satisfaction with one’s life through a Likert scale ranging from 7 (strongly agree) to 1 (strongly disagree). Higher scores suggest higher levels of life satisfaction. Scorers can be assigned to 6 different categories, ranging from “Extremely satisfied” (30-35 score) to “Extremely dissatisfied” (5-9 score).

1.4 Data analysis

Data analysis was conducted using SPSS Statistics 21.0. Descriptive analyses were performed to identify the general characteristics of the participants (Tab.1). Then, Pearson correlation analysis was performed to clarify relationships among the variables; t-tests for independent samples were also implemented to compare the means of the North and South student groups. Lastly, Cohen's d was calculated to evaluate the dimension of the effect for independent samples.

Table 1*Descriptive statistics of the sample (N= 300 students)*

Variable	f (%)	Mean	DS
Age			
13	5 (1.7%)		
14	51 (17.0%)		
15	99 (33.0%)	15.68	1.34
16	66 (22.0%)		
17	48 (16.0%)		
18	21 (7.0%)		
19	10 (3.3%)		
Gender			
Male	150 (50%)		
Female	150 (50%)		
Nationality			
Italian	282 (94.0%)		
Other	18 (6.0%)		
Region			
Northern Italy	123 (41.0%)		
Central Italy	31 (10.3%)		
Southern Italy	70 (23.3%)		
Islands	76 (25.3%)		
Type of School			
ITIS	125 (41.7%)		
Liceo	147 (49.0%)		
Vocational	28 (9.3%)		
School Year			
First	57 (19.0%)		
Second	88 (29.3%)		
Third	78 (26.0%)		
Fourth	50 (16.7%)		
Fifth	27 (9.0%)		
Only Child?			
Yes	50 (16.7%)		
No	250 (83.3%)		

Table 2*Descriptive statistics of the sample (N=300)*

Variable	f (%)
Educational Level (Mother)	
None	1 (.3%)
Elementary	4 (1.3%)
Lower Middle School Diploma	60 (20%)
High School Diploma	143 (47.7%)
Degree	59 (19.7%)
Post-graduate	16 (5.3%)
Does not know	17 (5.7%)
Occupation (Mother)	
Unemployed	8 (2.7%)
Housewife	68 (22.7%)
Worker	17 (5.7%)
Domestic Worker	6 (2%)
House Worker	3 (1%)
Farmer	1 (.3%)
Craftswoman	1 (.3%)
Freelancer	23 (7.7%)
Employee	85 (28.3%)
Official	4 (1.3%)
Entrepreneur	14 (4.7%)
Manager	6 (2%)
Other	64 (21.3%)
Educational Level (Father)	
None	1 (.3%)
Elementary	6 (2%)
Lower Middle School Diploma	74 (24.7%)
High School Diploma	138 (46%)
Degree	42 (14%)
Post-graduate	15 (5%)
Does not know	24 (8%)
Occupation (Father)	
Retired	9 (3%)
Unemployed	7 (2.3%)
Worker	63 (21%)
Domestic Worker	1 (.3%)
House Worker	1 (.3%)
Farmer	7 (2.3%)
Craftsman	5 (1.7%)
Freelancer	37 (12.3%)
Employee	64 (21.3%)
Official	2 (.7%)

Entrepreneur	34 (11.3%)
Manager	11 (3.7%)
Other	59 (19.7%)

Chapter 4

1. Results

1.1 Correlations

Starting from correlations, a first analysis of total scales coefficients revealed how total Hikikomori risk (HRIT) correlates with all considered variables, but more strongly and positively with all HRI subscales (Anthropophobia, Agoraphobia, Paranoia, Lethargy, Depressive Mood), with coefficients ranging from $r = .705$ to $r = .780$ ($p < .001$) and with total DERS index ($r = .658$; $p < .001$) and its subscales “Limited access to emotion regulation strategies” ($r = .601$; $p < .001$) and “Lack of emotional clarity” ($r = .583$; $p < .001$). With other DERS subscales, correlations are positive and their strength ranges from medium to high (from $r = .330$ to $r = .498$; $p < .001$). Furthermore, a medium-high correlation was found also between HRIT and Satisfaction with Life index ($r = -.509$; $p < .001$), while weaker links (from medium-small to small) were discovered between HRIT and Parenting Style Inventory-II’ subscales ($r = -.152$ with $p = .008$ for maternal autonomy; $r = -.160$ with $p = .006$ for maternal demandingness; from $r = -.233$ to $r = -.241$ con $p < .001$ for maternal responsivity and paternal demandingness and autonomy), with the exception of paternal responsivity, for which a medium-intensity correlation was found ($r = -.408$; $p < .001$). Moving forward with HRI, its subscales positively correlate with each other (from $r = .304$ to $r = .659$; $p < .001$) and with DERS total score (from $r = .352$ to $r = .627$; $p < .001$). The strongest negative correlations for SWLS, in addition to the one already mentioned with HRIT, were those with “Depressive mood”

subscale ($r = -.515$; $p < .001$) and with total DERS ($r = -.498$; $p < .001$) and its “regulation strategies” subscale ($r = -.430$; $p < .001$). As long as PSI-II is concerned, parental style subscales positively but weakly correlate with Satisfaction with Life index, but again paternal responsivity represents an exception, with a medium correlation ($r = .350$; $p < .001$). It is also interesting to notice how maternal responsivity, autonomy and demandingness subscales all positively correlate with their paternal counterparts (from $r = .462$ to $r = .513$; from $p < .001$) and how maternal responsivity and autonomy both correlate with each other ($r = .599$; $p < .001$). Moreover, maternal responsivity not only positively correlates with life satisfaction and so does with HRIT (but negatively, as previously reported), but also with HRI subscales (with the exception of anthropophobia and agoraphobia), with values ranging from $r = -.173$ ($p < .003$) to $r = -.319$ ($p < .001$), and with DERS total index ($r = -.349$; $p < .001$) and its subscale “Limited access to emotion regulation strategies” ($r = -.351$; $p < .001$). Paternal responsivity instead not only negatively correlates with HRIT, but also with all HRI subscales (from $r = -.205$ of anthropophobia to $r = -.408$ of HRIT; $p < .001$), with DERS total index ($r = -.459$; $p < .001$) and all its subscales (from $r = -.273$ to $r = -.394$; $p < .001$), while it positively correlates with life satisfaction ($r = .350$; $p < .001$). The last correlations worth to be mentioned for these scales are those between paternal autonomy and DERS total index ($r = -.347$; $p < .001$) and its subscale “Non-acceptance of emotional responses” ($r = -.317$; $p < .001$). Lastly, as for difficulties in emotion regulation scale (DERS), total DERS index correlates with all analysed variables, but with particular intensity with two HRI subscales ($r = +.572$ for lethargy and $r = +.627$ for depressive mood; $p < .001$). This strong association with lethargy and depressive mood is also found for all other DERS subscales. Moreover, all DERS subscales

strongly negatively correlate with life satisfaction (da $r = -.300$ a $r = -.498$; $p < .001$) and with maternal and paternal responsivity (from $r = -.217$ to $r = -.394$; $p < .001$).

1.2 Results from t-tests

The results of t-tests ordered from the first to the last hypothesis will be illustrated below. Therefore, the comparison between North and South Italy adolescents for Hikikomori risk will be first presented, followed by comparisons between these groups for parenting style, difficulties in emotion regulation and lastly life satisfaction. If Levene's test was violated, the t-test not assuming equality of variances between the two groups would be analysed. Regarding HRI, no significant differences emerged between the two groups for total risk of Hikikomori, $t(298) = -1.292$, $p = .099$, $d = -0.149$, 95% CI [-.376; .078] or other HRI subscales neither, with the exception of "Depressive mood" $t(298) = -1.882$, $p = .030$, $d = -.217$, 95% CI [-.444; .010]. Differences were found to be non-significant for life satisfaction either, $t(298) = .690$, $p = .245$, $d = .080$, 95% CI [-.147; .306], whereas the test was found to be sufficiently significant for maternal responsivity and autonomy variables, respectively $t(298) = 1.662$, $p = .049$, $d = .191$, 95% CI [-.036; .418] e $t(298) = 2.096$, $p = .018$, $d = .241$, 95% CI [.013; .468]. As for DERS scale, significant differences emerged for total DERS index, $t(298) = -2.030$, $p = .022$, $d = -.234$, 95% IC [-.461; -.007] and for "limited access to emotion regulation strategies" and "lack of emotional clarity" subscales, respectively $t(298) = -1.879$, $p = .031$, $d = -.217$, 95% IC [-.444; .010] and $t(298) = -1.771$, $p = .039$, $d = -.205$, 95% IC [-.431; .023]. Complete results for all t-tests are reported at the end of the chapter in Table 3.

2. Discussion

The strong correlation between HRIT and HRI subscales indicates that levels of measured constructs (anthropophobia, agoraphobia, paranoia, lethargy and depressive mood) are higher the higher risk of Hikikomori is (and vice versa), confirming what has been found in literature (Crepaldi, 2019a; Koyama et al., 2010; Ricci, 2008). Plus, the strong correlation with DERS scale confirms the link between difficulty in recognition, expression and regulation of emotions and Hikikomori risk, in agreement with literature on the topic (Frankova, 2019; Iannatone, Miscioscia et al., 2021). Specifically, our work highlighted that most affected areas are access to emotion regulation strategies and emotional clarity, and how these shortcomings prevent socially withdrawn adolescents from understanding what they are feeling and to self-regulate. Moving forward, negative correlation between HRIT and life satisfaction is also sustained by literature (Clair, Gordon et al., 2021; Um, 2024), while more interesting for sure is that the highest negative correlation score for HRIT was obtained with paternal responsivity: as a matter of fact, several authors (Crepaldi 2019a; Ricci, 2008) often reported the absence (or poor presence) of a father figure in Hikikomori families, and the fact that paternal responsivity resulted to be lower the higher the risk of Hikikomori was, seems to support this trend. We can affirm, therefore, that a responsive and present father can play a role in reducing risk of social withdrawal. Negative medium-strong correlation between life satisfaction and emotion difficulties instead (mostly for “Limited access to emotion regulation strategies” subscale) shows the strong impact of the latter and how it is extremely important to possess emotion regulation strategies. Paternal responsivity also moderately correlates with emotion regulation difficulties, showing once again the importance of paternal presence for these teenagers. Taking a glance at PSI-II scales,

maternal responsiveness and autonomy (and their paternal counterparts) appear to be highly correlated with each other: usually responsive parents also grant their children a good level of autonomy. Moreover, the fact that maternal responsiveness negatively correlates with almost all HRI subscales, and that paternal responsiveness negatively correlates with all of those, lead to an important statement: it seems that having responsive and loving parents (in particular, the father) represents a protection factor against social withdrawal. Maternal and paternal responsiveness also seem to positively influence life satisfaction and emotion regulation, as the first lowers the presence of poor emotion regulation abilities, while the latter correlates with all DERS subscales, suggesting that its high presence could reduce emotion difficulties in all areas. The last interesting aspects to be highlighted about parental style are: (1) negative correlation between maternal and paternal autonomy and Hikikomori risk total (HRIT), which confirms what was found by Lin et al. (2020) when they reported that an increase in parental psychological control is followed by an increase in social withdrawal symptoms. Our study found instead that giving autonomy to children seems to reduce Hikikomori risk. (2) negative correlation between paternal autonomy and total DERS index which, in other words, reveals that fathers who give autonomy to their children can see a reduction of their children' emotion difficulties also. As for DERS scale correlations, its subscales highly correlate with each other and DERS total index correlates with all analysed variables. More specifically, leaving aside the strong negative associations with life satisfaction, maternal and paternal responsiveness and paternal autonomy, previously widely discussed, and considering the strong correlation with HRIT, it seems important to us to report that equally strong correlations also exist between total DERS and lethargy and depressed mood, HRI subscales. Furthermore,

these strong associations are present between HRI subscales and DERS subscales. These results suggest that social withdrawal signs and emotion difficulties usually coexist, in agreement with what is described in literature (Bagnato, 2017; Ricci, 2008). Another interesting aspect is that all DERS subscales strongly and negatively correlate with life satisfaction, showing that often emotion difficulties (mostly lack of emotion regulation strategies) and low life satisfaction tend to co-present. Lastly, numerous correlations between DERS and PSI-II subscales have been found, but one surely worth to be mentioned is between DERS subscales (and total) and maternal and paternal responsiveness (from $r = -.217$ to $r = -.394$). In developmental age, it is parents' duty to teach their child how to recognize and regulate his emotions: in fact, parents regulate him/her when he/she is at a very young age (hetero-regulation), allowing him/her to acquire the ability to self-regulate in the later development. However, when parents are not adequately responsive, the child struggles or does not learn at all to recognize emotions or regulate them and this could explain why, according to the results, a high level of emotional difficulties is associated with a low level of maternal and paternal responsiveness. In conclusion, therefore, the correlation analysis reported a fundamental fact, namely that greater difficulties in emotional regulation, less parental responsiveness and support and less life satisfaction are associated with a greater risk of social withdrawal in adolescents.

2.1 Test of hypotheses

2.1.1 Hikikomori risk

First hypothesis was to explore risk of Hikikomori between North and South Italy

adolescents (CNR-IFC, 2023; Crepaldi, 2023; Bagnato, 2017; Esposito et al., 2023; ISS, 2023; MIUR, 2023). Considering results coming from testing of hypotheses, despite southern teenagers' mean being slightly higher ($M = 64.68$, $ds = 15.84$) than their northern peers' mean ($M = 62.35$, $ds = 15.43$), this difference did not manifest as sufficiently significant. Same to be said for all HRI subscales except "Depressive mood", for which a small effect was found (Cohen's $d = -.217$). Therefore, it seems there are no substantial differences between North and South of the country regarding risk of social withdrawal. This finding openly contrasts with what was exposed by CNR-IFC's study (2023), which reported more social withdrawal cases in the South than in the North of Italy. The small effect found for "Depressive mood" allows us to say that Southern teenagers show a slightly more depressed mood than their Northern peers.

2.1.2. Parenting style

The second hypothesis sustained that Northern parents' parenting styles could be more effective than southern parents' (Bagnato, 2017; Hastings et al., 2010; Lin et al., 2020; Rubin, Cheah & Fox, 2010). Results show that the only subscales for which significant differences between groups were found are maternal responsivity and autonomy, while no relevant effect was found for paternal variables. However, effects' size is rather small (Cohen's $d = .191$ for maternal responsivity and Cohen's $d = .241$ for maternal autonomy). Therefore, it seems that northern mothers are, on average, slightly more responsive and autonomy-granting than southern mothers. In conclusion, the initial hypothesis is only partially supported.

2.1.3 Difficulties in emotion regulation

Our third hypothesis sustained that Southern adolescents could have more difficulties in emotion regulation than their Northern peers (Bagnato, 2017). Results found significant differences between the two groups for total DERS index (Cohen's $d = -.234$) and its “limited access to emotion regulation strategies” and “lack of emotional clarity” subscales, respectively $d = -.217$ and $d = -.205$ (small effects). Therefore, it could be said that Southern teenagers have, on average, slightly more emotion regulation difficulties than their northern peers, especially regarding emotion recognition and access to strategies for emotion regulation. In view of what was just exposed, our hypothesis is only partially supported.

2.1.4. Life Satisfaction

According to our fourth hypothesis, a higher life satisfaction in Northern teenagers rather than their Southern peers was expected to be found (Bagnato, 2017). However, results show that actually there are no differences between the two groups. Therefore, it seems that, despite Southern Italians facing more challenges in terms of individual and social well-being than Northern Italians do, Southern teenagers still display life satisfaction levels comparable to those of their Northern peers. Our fourth hypothesis cannot be hence supported.

Table 3

t-test results (*N* = 300)

Variab le	North M (sd)	South M (sd)	<i>T</i>	Degrees of freedom	<i>P</i>	Cohen' s <i>d</i>
HRIT	62.34 (15.43)	64.68 (15.84)	-1.292	298	.099	-.149
ANT	9.34 (3.63)	9.36 (3.78)	-.045		.482	-.005
AGOR	8.88 (3.80)	9.05 (3.83)	-.381		.352	-.004
PAR	21.92 (4.99)	22.50 (5.45)	-.968		.167	-.112
LET	10.30 (4.15)	10.92 (4.22)	-1.272		.102	-.147
DEP	11.9 (4.22)	12.84 (4.46)	-1.882		.030	-.217
SWLS	21.25 (6.54)	20.72 (6.81)	.690	298	.245	.080
Resp_ m	19.83 (3.92)	19.00 (4.77)	1.656	298	.049	.191
Autono my_m	19.37 (3.53)	18.40 (4.50)	2.086	298	.018	.241
Dem_ m	16.30 (3.09)	16.53 (3.14)	-.638	298	.262	-.074
Resp_ p	17.92 (5.02)	17.65 (5.09)	.465	298	.321	.054
Autono my_p	19.11 (4.02)	18.40 (4.15)	1.533	298	.063	.177
Dem_ p	15.67 (3.20)	16.04 (3.44)	-.969	298	.167	-.112
Total DERS	2.48 (.74)	2.65 (.73)	-2.030	298	.022	-.234
DERS_ Non a.	2.33 (1.04)	2.51 (.99)	-1.592	298	.056	-.184
DERS Goal diff.	2.96 (1.02)	3.03 (.99)	-.628	298	.265	-.072
DERS_ Strategi es	2.22 (.99)	2.44 (1.07)	-1.879	298	.031	-.217
DERS_ Imp Contr.	2.25 (1.05)	2.44 (1.15)	-1.460	298	.073	-1.69
DERS_ Em. Reg. Awaren ess	2.59 (.96)	2.76 (.80)	-1.606	298	.055	-.186

DERS_						
Em.	2.52 (1.00)	2.72 (.99)	-1.771	298	.039	-.205
clarity						

Chapter 5

1. Conclusion

The aim of this work was to investigate social withdrawal in adolescents, operating a comparison between Northern and Southern Italian teenagers, and exploring ties with emotion regulation, parenting style and life satisfaction constructs. In the first chapter it was explained how social withdrawal phenomenon and its extreme variant (Hikikomori) are not limited to Japan alone, but are also spreading to the Western world: that's because it seems that social withdrawal makes its way in rich and highly industrialized countries. It was also seen how the phenomenon in Italy manifests itself less severely than in Japan (Bagnato, 2017), due to cultural differences between these countries, specifically for extremely high performance pressure on Japanese youth, higher levels of fear of failure and avoidant behaviours in these teenagers and subsequent overwhelming sense of shame whenever that failure becomes reality (Crepaldi, 2019a). Furthermore, social withdrawal risk factors were identified, such as an overprotective and excessively nurturing parenting style, discouraging of children's autonomy (Hastings et al., 2010; Rubin, Cheah & Fox, 2010), school refusal (Honjo et al., 1992) and bullying (Li & Wong, 2015a; Beccaria et al., 2022), and bullying as contextual factors, while a fearful temperament and high levels of anxiety (Rubin & Burgess, 2001) and shyness (Hu, 2024), dysfunctional thoughts (Bagnato, 2017), low levels of self-esteem (Hamasaki, Pionniè-Dax, Dorard et al., 2021; Rubin et al., 2009), many more were identified as individual risk factors. Moreover, it was described how the number of social withdrawn subjects increased after the pandemic (Cruz, Sousa et al., 2023) and how high schoolers were more affected by negative consequences than

middle schoolers (Windarwati et al., 2022). It was then analysed the Italian context, revealing that, despite studies had been conducted (CNR-IFC, 2023; Crepaldi, 2019b; ISS, 2023), data usually did not agree with each other. In the second part of this work, four hypotheses were formulated, respectively (1) exploration of Hikikomori risk between North and South Italian teenagers, (2) a more effective parenting style in Northern parents than Southern parents, (3) more emotion difficulties for Southern adolescents rather than Northern, (4) higher life satisfaction in Northern teenagers rather than Southern. However, results revealed that actually there are no significant differences between these groups for Hikikomori risk and life satisfaction, while it was possible to say that Southern adolescents have slightly more difficulties in emotion regulation rather than their Northern peers and that Northern parents seem to be slightly more responsive and grant a little bit more autonomy to their children than Southern parents.

1.1 Limitations and future research

This study tried to produce more data on differences between North and South of Italy regarding social withdrawal risk in adolescence. However, a single study is not enough to clarify the complex dynamics that play out through these variables in such a specific sample of adolescents: for this reason, we hope that future studies can be conducted so that an adequate understanding of the phenomenon can be followed by an effective tackling of the problem. Plus, this study is not free from limitations, as we identified three problems:

- 1) Despite our efforts to create a homogeneous sample, the number of participants from

Centre-Italy is lower than those of other areas (123 administrations for the North, 70 for the South, 79 for Italian Islands). That is why we chose to merge Centre-Italian participants with Northern ones. Moreover, not all regions were represented since no local participants took part to the study. Therefore, in future studies it can be thought of making the samples even more homogeneous, trying to represent all the regions and obtaining administrations for each one of them;

2) In this study, as for the report of Institute of Clinical Physiology of the National Research Council of Pisa (CNR-IFC, 2023), the questionnaires were administered to teenagers who were still attending school, cutting out those who had already dropped out. In the future, therefore, it would be very important to carry out studies that also involve these teenagers;

3) The use of self-report tools, which, due to their intrinsic characteristic of being self-administered, can lead to the presence of bias in the data analysis (e.g. social desirability).

References

- Amendola S., Cerutti R., von Wyl A. (2023) Estimating the prevalence and characteristics of people in severe social isolation in 29 European countries: A secondary analysis of data from the European Social Survey round 9 (2018–2020). *PLOS ONE* 18(9) <https://doi.org/10.1371/journal.pone.0291341>
- American Psychiatric Association, DSM-5 Task Force (2013). *Diagnostic and statistical manual of mental disorders: DSM-5™* (5th ed.). American Psychiatric Publishing, Inc.
- Andorno F., Lancini M. (2019). Autoreclusione volontaria. Proteggersi dalla vergogna in Lancini M. (a cura di), *Il ritiro sociale negli adolescenti, la solitudine di una generazione iperconnessa* (pp. 167-188). Azzate (VA), Raffaello Cortina Editore.
- Armsden, G. & Greenberg, M. (1987). The Inventory of Parent and Peer Attachment: Individual Differences and Their Relationship to Psychological Well-Being in Adolescence. *Journal of youth and adolescence*. 16. 427-54. <https://doi.org/10.1007/BF02202939>
- Bagnato K., (2017) *L'hikikomori: un fenomeno di autoreclusione giovanile*, Roma, Carocci editore
- Bagnato K., (2015). La learned helplessness (impotenza appresa), in Bagnato K., Michelin Salomon A., Versace A., *Il learning context. Prospettive psicopedagogiche tra vincoli e risorse*. Lecce, PensaMultimedia*
- Barbaranelli, C., Caprara G.V., Rabasca A., Pastorelli, C. (2003) A questionnaire for measuring the Big Five in late childhood. *Personality and Individual Differences*, Volume 34, Issue 4, Pages 645-664. [https://doi.org/10.1016/S0191-8869\(02\)00051-X](https://doi.org/10.1016/S0191-8869(02)00051-X)
- Baumrind, D. (1971) Current Patterns of Parental Authority. *Developmental Psychology*. 4 (1, Pt.2), 1-103.* <https://doi.org/10.1037/h0030372>
- Barzeva, S. A., Meeus, W. H. J., & Oldehinkel, A. J. (2019). Social Withdrawal in Adolescence and Early Adulthood: Measurement Issues, Normative Development, and Distinct Trajectories. *Journal of abnormal child psychology*, 47(5), 865–879. <https://doi.org/10.1007/s10802-018-0497-4>
- Beccaria F., Scavarda A., Roggero A., Rabaglietti E. (2022) Protective and risk factors for social withdrawal in adolescence. A mixed-method study of Italian students' wellbeing. *Modern Italy*, 27(3), 259-276. <https://doi.org/10.1017/mit.2022.10>
- Bishop, G., Spence, S. H., & McDonald, C. (2003). Can parents and teachers provide a reliable and valid report of behavioral inhibition? *Child development*, 74(6), 1899–1917. <https://doi.org/10.1046/j.1467-8624.2003.00645.x>

- Bonnaire, C., & Roignot, Z. (2023). Relationship Between Social Withdrawal (Hikikomori), Personality, and Coping in an Adult Population. *Psychiatry investigation*, 20(8), 740–749. <https://doi.org/10.30773/pi.2023.0099>
- Buday E. (2019). Identità e corpo, mentalizzazione e sperimentazione di sé in rete, in Lancini M. (a cura di), *Il ritiro sociale negli adolescenti, la solitudine di una generazione iperconnessa* (pp. 71-91). Azzate (VA), Raffaello Cortina Editore
- Cacioppo, J. T., & Cacioppo, S. (2014). Social Relationships and Health: The Toxic Effects of Perceived Social Isolation. *Social and personality psychology compass*, 8(2), 58–72. <https://doi.org/10.1111/spc3.12087>
- Caresta A.M. (2018) *Generazione Hikikomori: isolarsi dal mondo, fra web e manga*. Roma, Castelvecchi Editore.
- Castiello, U., Becchio, C., Zoia, S., Nelini, C., Sartori, L., Blason, L., D'Ottavio, G., Bulgheroni, M., & Gallese, V. (2010). Wired to be social: the ontogeny of human interaction. *PloS one*, 5(10), e13199. <https://doi.org/10.1371/journal.pone.0013199>
- Cerrai, S., Biagioni, S., & Molinaro S. – CNR-IFC. (2023) *Hikikomori: indagine sul ritiro sociale volontario dei giovani italiani*. Gruppo Abele. https://www.gruppoabele.org/it-schede-1579-vite_in_disparte
- Clair, R., Gordon, M., Kroon, M., Reilly C. (2021). The effects of social isolation on well-being and life satisfaction during pandemic. *Humanities and Social Sciences Communications*, 8(28). <https://doi.org/10.1057/s41599-021-00710-3>
- Concina, E., Frate, S. and Biasutti, M. (2024) Secondary school teachers' beliefs and needs about hikikomori and social withdrawn students. *International Journal of Educational Management*, 38(2), pp. 317-332. <https://doi.org/10.1108/IJEM-08-2023-0377>
- Coplan, R.J. and Armer, M. (2007) A “Multitude” of Solitude: A Closer Look at Social Withdrawal and Nonsocial Play in Early Childhood. *Child Development Perspectives*, 1: 26-32. <https://doi.org/10.1111/j.1750-8606.2007.00006.x>
- Crepaldi M., (2019a) *Hikikomori. I giovani che non escono di casa*. Roma, Alpes Italia.
- Crepaldi, M. (2019b, February 4th). *I primi dati statistici sul fenomeno degli hikikomori in Italia*. * <https://www.hikikomoriitalia.it/2019/02/dati-statistici-fenomeno-hikikomori.html>
- Crepaldi, M. (2023, March 6th) *Ci sono davvero oltre 50 mila hikikomori adolescenti in Italia? Analisi critica dello studio del CNR*. <https://www.hikikomoriitalia.it/2023/03/blog-post.html>
- Cruz, S., Sousa, M., Marchante, M., & Coelho, V. A. (2023). Trajectories of social withdrawal and social anxiety and their relationship with self-esteem before, during, and

after the school lockdowns. *Scientific reports*, 13(1), 16376.
<https://doi.org/10.1038/s41598-023-43497-w>

Darling, N., & Toyokawa, T. (1997). Construction and validation of the parenting style inventory II (PSI-II). Unpublished manuscript, 89.*

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of personality assessment*, 49(1), 71–75.
https://doi.org/10.1207/s15327752jpa4901_13

Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D.-w., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143–156.
<https://doi.org/10.1007/s11205-009-9493-y>

Dziesinski M.J. (2006) Investigations into the phenomenon of acute social withdrawal in contemporary Japan. M.Sc. Thesis, Sociology, University of Hawai'i, Manoa.
https://www.academia.edu/3554912/Investigations_into_the_Phenomenon_of_Acute_Social_Withdrawal_in_Contemporary_Japan

Eckardt J. P. (2023). Does the Hikikomori Syndrome of Social Withdrawal Exist in Denmark? A Research Request. *JMA journal*, 6(1), 86–87.
<https://doi.org/10.31662/jmaj.2021-0217>

Esposito S., Giannitto N., Squarcia A., Neglia C., Argentiero A., Minichetti P., et al. (2021) Development of psychological problems among adolescents during school closures because of the COVID-19 lockdown phase in Italy: a cross-sectional survey. *Frontiers in Pediatrics*, Vol 8. <https://doi.org/10.3389/fped.2020.628072>

Esposito, V., Addeo, F., D'Auria, V., & Lenzi, F. R. (2023). The Sustainability of Emerging Social Vulnerabilities: The Hikikomori Phenomenon in Southern Italy. *Sustainability*, 15(4), 3869. <https://doi.org/10.3390/su15043869>

Esterwood, E., & Saeed, S. A. (2020). Past Epidemics, Natural Disasters, COVID19, and Mental Health: Learning from History as we Deal with the Present and Prepare for the Future. *The Psychiatric quarterly*, 91(4), 1121–1133.
<https://doi.org/10.1007/s11126-020-09808-4>

Frankova I. (2019). Similar but Different: Psychological and Psychopathological Features of Primary and Secondary Hikikomori. *Frontiers in psychiatry*, 10, 558.
<https://doi.org/10.3389/fpsy.2019.00558>

Goodman, R. (1997), The Strengths and Difficulties Questionnaire: A Research Note. *Journal of Child Psychology and Psychiatry*, 38: 581-586.
<https://doi.org/10.1111/j.1469-7610.1997.tb01545.x>

Hamasaki, Y., Pionnié-Dax, N., Dorard, G., Tajan, N., & Hikida, T. (2021). Identifying Social Withdrawal (Hikikomori) Factors in Adolescents: Understanding the Hikikomori Spectrum. *Child psychiatry and human development*, 52(5), 808–817.

<https://doi.org/10.1007/s10578-020-01064-8>

Hastings, P. D., Nuselovici, J. N., Rubin, K. H., & Cheah, C. S. L. (2010). Shyness, parenting, and parent-child relationships. In K. H. Rubin & R. J. Coplan (Eds.), *The development of shyness and social withdrawal* (pp. 107–130). The Guilford Press.

Honjo, S., Kasahara, Y., & Ohtaka, K. (1992). School refusal in Japan. *Acta paedopsychiatrica*, 55(1), 29–32.

Hu, W. (2024). Social Withdrawal: A Systematic Review of the Influencing Mechanism, Forming Reason and Discussing the Affected Groups. *Journal of Education, Humanities and Social Sciences*, 26, 645-654.

<https://doi.org/10.54097/8yby8004>

Iannattone, S., Miscioscia, M., Raffagnato, A., & Gatta, M. (2021). The Role of Alexithymia in Social Withdrawal during Adolescence: A Case-Control Study. *Children (Basel, Switzerland)*, 8(2), 165. <https://doi.org/10.3390/children8020165>

Inoue, S., Kato, T., & Yorifuji, T. (2018). Life Satisfaction, Interpersonal Relationships, and Learning Influence Withdrawal from School: A Study among Junior High School Students in Japan. *International journal of environmental research and public health*, 15(10), 2309. <https://doi.org/10.3390/ijerph15102309>

Kato, T. A., Kanba, S., & Teo, A. R. (2018). Hikikomori: experience in Japan and international relevance. *World psychiatry: official journal of the World Psychiatric Association (WPA)*, 17(1), 105–106. <https://doi.org/10.1002/wps.20497>

Kaufman, E. A., Xia, M., Fosco, G., Yaptangco, M., Skidmore, C. R., & Crowell, S. E. (2016). The Difficulties in Emotion Regulation Scale Short Form (DERS-SF): Validation and replication in adolescent and adult samples. *Journal of Psychopathology and Behavioral Assessment*, 38(3), 443–455. <https://doi.org/10.1007/s10862-015-9529-3>

Kekkonen, V., Tolmunen, T., Kraav, S.-L., Hintikka, J., Kivimäki, P., Kaarre, O., & Laukkanen, E. (2020). Adolescents' peer contacts promote life satisfaction in young adulthood—A connection mediated by the subjective experience of not being lonely. *Personality and Individual Differences*, 167, Article 110264. <https://doi.org/10.1016/j.paid.2020.110264>

Kerekes, N., Bador, K., Sfindla, A., Belaatar, M., Mzadi, A. E., Jovic, V., Damjanovic, R., Erlandsson, M., Nguyen, H. T. M., Nguyen, N. T. A., Ulberg, S. F., Kuch-Cecconi, R. H., Szombathyne Meszaros, Z., Stevanovic, D., Senhaji, M., Hedman Ahlström, B., & Zouini, B. (2021). Changes in Adolescents' Psychosocial Functioning and Well-Being as a Consequence of Long-Term COVID-19 Restrictions. *International journal of environmental research and public health*, 18(16), 8755. <https://doi.org/10.3390/ijerph18168755>

Koyama, A., Miyake, Y., Kawakami, N., Tsuchiya, M., Tachimori, H., Takeshima, T., & World Mental Health Japan Survey Group, 2002-2006 (2010). Lifetime prevalence, psychiatric comorbidity and demographic correlates of "hikikomori" in a community population in Japan. *Psychiatry research*, 176(1), 69–74.
<https://doi.org/10.1016/j.psychres.2008.10.019>

Krieg, A., & Dickie, J. R. (2013). Attachment and hikikomori: a psychosocial developmental model. *The International journal of social psychiatry*, 59(1), 61–72.
<https://doi.org/10.1177/0020764011423182>

Lancini M. (a cura di) (2019) *Il ritiro sociale negli adolescenti, la solitudine di una generazione iperconnessa*. Azzate (VA), Raffaello Cortina Editore

Li, T. M., & Wong, P. W. (2015a). Youth social withdrawal behavior (hikikomori): A systematic review of qualitative and quantitative studies. *The Australian and New Zealand journal of psychiatry*, 49(7), 595–609.
<https://doi.org/10.1177/0004867415581179>

Li, T. M., & Wong, P. W. (2015b). Editorial Perspective: Pathological social withdrawal during in adolescence: a culture-specific or a global phenomenon? *Journal of child psychology and psychiatry, and allied disciplines*, 56(10), 1039–1041.
<https://doi.org/10.1111/jcpp.12440>

Lin, H., Harrist, A. W., Lansford, J. E., Pettit, G. S., Bates, J. E., & Dodge, K. A. (2020). Adolescent social withdrawal, parental psychological control, and parental knowledge across seven years: A developmental cascade model. *Journal of adolescence*, 81, 124–134. <https://doi.org/10.1016/j.adolescence.2020.04.007>

Loscalzo, Y., Nannicini, C., Huai-Ching Liu, I. T., & Giannini, M. (2022). Hikikomori Risk Inventory (HRI-24): A new instrument for evaluating Hikikomori in both Eastern and Western countries. *The International journal of social psychiatry*, 68(1), 90–107.
<https://doi.org/10.1177/0020764020975800>

Malagón-Amor, Á., Martín-López, L. M., Córcoles, D., González, A., Bellsolà, M., Teo, A. R., Bulbena, A., Pérez, V., & Bergé, D. (2020). Family Features of Social Withdrawal Syndrome (Hikikomori). *Frontiers in psychiatry*, 11, 138.
<https://doi.org/10.3389/fpsy.2020.00138>

Ministero dell'Istruzione, dell'Università e della Ricerca (2019) *Adolescenti eremiti sociali. Rilevazione nelle scuole dell'Emilia-Romagna degli alunni che non frequentano, ritirati in casa, per motivi psicologici*. Ufficio Scolastico Regionale per l'Emilia-Romagna. <https://www.istruzioneer.gov.it/wp-content/uploads/2018/11/2018-nov-6-alunni-ritirati-in-casa-ALLEGATO-1.pdf>

Mortali C., Mastrobattista L., Palmi, I., Solimini R., Pacifici R., Pichini S. & Minutillo A. - ISS. (2023) *Rapporto ISTISAN 23/25 - Dipendenze comportamentali nella Generazione Z: uno studio di prevalenza nella popolazione scolastica (11-17 anni) e focus sulle competenze genitoriali*.
<https://www.iss.it/documents/20126/6682486/23-25+web.pdf/7c107806-50db-5601->

[c73e-c90badec3765?t=1702626073305](https://doi.org/10.3390/covid3080082)

Ogawa T., Shiratori Y., Midorikawa H., Aiba M., Sugawara D., Kawakami N., Arai T. & Tachikawa H. (2023) A Survey of Changes in the Psychological State of Individuals with Social Withdrawal (hikikomori) in the Context of the COVID Pandemic. *COVID*. 3(8):1158-1172. <https://doi.org/10.3390/covid3080082>

Park, H. E. (G.), & Yap, S.-F. (C.). (2024). Technology affordances and social withdrawal: The rise of hikikomori. *Psychology & Marketing*, 41(7), 1469–1488. <https://doi.org/10.1002/mar.21991>

Partanen, E., Kujala, T., Tervaniemi, M., & Huotilainen, M. (2013). Prenatal music exposure induces long-term neural effects. *PloS one*, 8(10), e78946. <https://doi.org/10.1371/journal.pone.0078946>

Pietropolli Charmet G. (2013), *La paura di essere brutti. Gli adolescenti e il corpo*. Milano, Raffaello Cortina Editore

Pontes, H. M., & Griffiths, M. D. (2017). The development and psychometric evaluation of the Internet Disorder Scale (IDS-15). *Addictive behaviors*, 64, 261–268. <https://doi.org/10.1016/j.addbeh.2015.09.003>

Pozza, A., Coluccia, A., Kato, T., Gaetani, M., & Ferretti, F. (2019). The 'Hikikomori' syndrome: worldwide prevalence and co-occurring major psychiatric disorders: a systematic review and meta-analysis protocol. *BMJ open*, 9(9), e025213. <https://doi.org/10.1136/bmjopen-2018-025213>

Raine, A., Dodge, K., Loeber, R., Gatzke-Kopp, L., Lynam, D., Reynolds, C., Stouthamer-Loeber, M., & Liu, J. (2006). The Reactive-Proactive Aggression Questionnaire: Differential Correlates of Reactive and Proactive Aggression in Adolescent Boys. *Aggressive behavior*, 32(2), 159–171. <https://doi.org/10.1002/ab.20115>

Ranieri, F., Andreoli, M., Bellagamba, E., Franchi E., Mancini, F., Pitti, L. & Stoppielli, M. (2015). *Adolescenti tra abbandono scolastico e ritiro sociale: il fenomeno degli "Hikikomori" ad Arezzo*. <https://www.altreadolescenza.it/download/Adolescenti%20tra%20abbandono%20scolastico%20e%20ritiro%20sociale%20-%20il%20fenomeno%20degli%20Hikikomori%20ad%20Arezzo%20-%20Ranieri%202015.pdf>

Ricci C. (2008) *Hikikomori: adolescenti in volontaria reclusione*, Milano, FrancoAngeli

Rooksby, M., Furuhashi, T., & McLeod, H. J. (2020). Hikikomori: a hidden mental health need following the COVID-19 pandemic. *World psychiatry: official journal of the World Psychiatric Association (WPA)*, 19(3), 399–400. <https://doi.org/10.1002/wps.20804>

- Rosenberg, M. (1965). *Society and the Adolescent Self-Image**. Princeton University Press
- Rubin, K.H., & Mills, R.S.L. (1992). Parents' ideas about the development of aggression and withdrawal. In I. Sigel, J. Goodnow, A. & McGillicuddy-deLisi (eds), *Parental Belief Systems* (pp. 41-68). Hillsdale, N.J: Erlbaum
- Rubin, K. H., & Burgess, K. B. (2001). Social withdrawal and anxiety. In M. W. Vasey & M. R. Dadds (Eds.), *The developmental psychopathology of anxiety* (pp. 407–434). Oxford University Press. <https://doi.org/10.1093/med:psych/9780195123630.003.0018>
- Rubin, K. H., Coplan, R. J., & Bowker, J. C. (2009). Social withdrawal in childhood. *Annual Review of Psychology*, 60, 141–171. <https://doi.org/10.1146/annurev.psych.60.110707.163642>
- Rubin, K., Cheah, C. & Fox, N. (2010). Emotion Regulation, Parenting and Display of Social Reticence in Preschoolers. *Early Education and Development*. 12. 97-115. https://doi.org/10.1207/s15566935eed1201_6
- Rubin, K. H., & Chronis-Tuscano, A. (2021). Perspectives on Social Withdrawal in Childhood: Past, Present, and Prospects. *Child development perspectives*, 15(3), 160–167. <https://doi.org/10.1111/cdep.12417>
- Saito T. (2013), *Adolescence without End**, Minnesota University Press, USA
- Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology*, 53(1), 80–93. <https://doi.org/10.1037/0022-0167.53.1.80>
- Suwa, M., Suzuki, K., Hara, K., Watanabe, H., & Takahashi, T. (2003). Family features in primary social withdrawal among young adults. *Psychiatry and clinical neurosciences*, 57(6), 586–594. <https://doi.org/10.1046/j.1440-1819.2003.01172.x>
- Suwa, M., & Suzuki, K. (2013). The phenomenon of “hikikomori” (social withdrawal) and the socio-cultural situation in Japan today. *Journal of Psychopathology*, 19(3), 191–198 <https://old.jpsychopathol.it/wp-content/uploads/2015/07/01b-Suwa1.pdf>
- Tajan, N., Yukiko, H., & Pionnié-Dax, N. (2017). Hikikomori: The Japanese cabinet office's 2016 survey of acute social withdrawal. *The Asia-Pacific Journal*, 15(5), 5017. <https://doi.org/10.1177/18344909241274808>
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High Self-Control Predicts Good Adjustment, Less Pathology, Better Grades, and Interpersonal Success. *Journal of Personality*, 72(2), 271–322. <https://doi.org/10.1111/j.0022-3506.2004.00263.x>
- Teo, A. R., Chen, J. I., Kubo, H., Katsuki, R., Sato-Kasai, M., Shimokawa, N.,

- Hayakawa, K., Umene-Nakano, W., Aikens, J. E., Kanba, S., & Kato, T. A. (2018). Development and validation of the 25-item Hikikomori Questionnaire (HQ-25). *Psychiatry and clinical neurosciences*, 72(10), 780–788.
<https://doi.org/10.1111/pcn.12691>
- Um Y.J. (2024). The effect of social withdrawal on life satisfaction among multicultural adolescents: The mediating and moderating effects of parental support. *Heliyon*, 10(19),
<https://doi.org/10.1016/j.heliyon.2024.e38313>
- Verhagen, M., Derks, M., Roelofs, K., & Maciejewski, D. (2023). Behavioral inhibition, negative parenting, and social withdrawal: Longitudinal associations with loneliness during early, middle, and late adolescence. *Child development*, 94(2), 512–528. <https://doi.org/10.1111/cdev.13874>
- Windarwati, H. D., Lestari, R., Supianto, A. A., Wicaksono, S. A., Ati, N. A. L., Kusumawati, M. W., Humayya, A., & Ekawati, D. (2022). A narrative review into the impact of COVID-19 pandemic on senior high school adolescent mental health. *Journal of child and adolescent psychiatric nursing: official publication of the Association of Child and Adolescent Psychiatric Nurses, Inc*, 35(3), 206–217.
<https://doi.org/10.1111/jcap.12370>
- Wong P. W. C. (2020). Potential changes to the hikikomori phenomenon in the wake of the Covid-19 pandemic. *Asian journal of psychiatry*, 54, 102288.
<https://doi.org/10.1016/j.ajp.2020.102288>
- Xu, J., Sun, R., Li, Y., Chen, X., Yiu, W. Y. V., Zhou, N., Wang, Y., Luo, S., Shen, J., & Liu, L. (2022). Subtypes of social withdrawal and mental health trajectories during COVID-19 pandemic. *Journal of research in personality*, 97, 104203.
<https://doi.org/10.1016/j.jrp.2022.104203>

*not directly consulted sources