Protective and risk factors for social withdrawal in adolescence. A mixed-method study of Italian students' wellbeing

(Article begins on next page)

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Abstract

This research project is aimed at identifying risk and protective factors of social withdrawal, by studying some areas of young people's psychological wellbeing.

The study took place in a middle-sized town in the North-West of Italy. A total of 1102 students participated in the study. An online survey was sent to all the students attending the second year of local high schools, then the results were combined with two focus groups, with young people and adults.

The findings indicate that socio-cultural factors may be the reasons why social disengagement is so widespread. The societal pressure to be successful in every life domain may push young people, unable to conform, out of the competition. Bullying, negative school experiences and stress are associated with an overinvestment of time on the Internet, a harbinger of social isolation. This study's findings suggest the need to plan student initiatives, to identify the warning signals.

Introduction

This interdisciplinary study was based on both psychological and sociological approaches, mainly Merton's stress theory and psychological theories on the effects of social media on well-being and social interaction to shed light on social withdrawal.

Acute social withdrawal, which also includes the phenomenon of *hikikomori*, concerns adolescents and young adults who have withdrawn from society, retreating to their rooms for months or years and severing almost all ties with the outside world. Never described before the late 1970s, *hikikomori* has become a silent epidemic with hundreds of thousands of cases now estimated in Japan (Saitō and Angles 2013). One observational

study estimated that 1.2% of a community population in Japan (around 232,000 people) had experienced youth social withdrawal (Koyama et al., 2010).

The large-scale use of the term in psychiatric literature can be traced back to the mid-1980s (Teo 2010), after Japanese psychiatrist, Saitō Tamaki's work (1998) provoked a national debate about the causes and extent of the problem. According to Saitō and Angles (2013), *hikikomori* were mainly male, middle class young people who spent six months or more in an asocial state, and had adverse childhood experiences, like bullying in junior high school.

Hikikomori has been long considered a "culture-bound" syndrome (Sakamoto et al. 2005; Cole 2013) especially widespread in Japan (Teo 2010), as a result of the troubled process of modernization of the country after the Second World War. Socio-cultural factors related to the phenomenon are child rearing practices, characterized by an intense bond between mother and son, similar to a form of dependence (*amae*) alongside a poor relationship with an absent father; religious factors, such as the Confucian perspective, based on the harmony within the group, which discourages individual expression (Zielinziger 2006). Contemporary young people increasingly exposed to western individualist values through media are less eager to conform to traditional social norms, and they are not always able to find a way to cope with these different pressures (Lassiter et al. 2018).

In the last decade, an increasing number of cases have been reported in different countries around the world, such as in the Asian continent and the Arab region as well as in the United States (Kato et al. 2011), and in the South of Europe: in Spain (Ovejero et al. 2014; Malagón-Amor et al. 2015), and recently in Italy (De et al. 2013; Ranieri et al. 2015). Different theories have been advanced to interpret the phenomenon: it may be another issue of youths, such as NEETs (Not in Education, Employment, or Training; Furlong 2008) or a type of lifestyle for young people (Chang and Lo 2013). Not only psychological factors, such as maladaptive interdependence, associated with fear of criticism and rejection, and counterdependence, namely the refusal of attachment and dependence, but also socio-cultural factors must be taken into consideration to disentangle social withdrawal trajectories (Li and Wong 2015). The wide diffusion of this phenomenon suggests also a form of response to social and economic change that transcends culture, being an anomic and adaptive strategy to the collapse of traditional structures of opportunity and to the precariousness of youth transitions. The hikikomori

can also be seen as a retreatist that rejects both the cultural goals and the means to achieve them, so that the social withdrawal can be understood as a specific adaptation strategy, based on a way to escape into an unproductive, non-striving lifestyle (Merton 1938; Toivonen et al. 2011). Indeed, in post-industrialized societies youth transitions have changed radically, with mass transitions replaced by non-linear and more individualized processes (Furlong 2008). At once, the economic stagnation and the social insecurity coexist with pressures to be (globally) competitive and to an increasing individualism, as a set of ideas and ideals with a potential negative impact on mental health, especially among young people (Toivonen et al. 2011). On the one hand, unforeseeable careers and irregular employment lead to downward social mobility (Furlong, 2008) and to a precarious social status (Lee et al., 2013). A loss of a sense of direction and the failure to find a place in society may therefore cause disengagement (Furlong et al., 2018). On the other hand, the narcissistic characteristics of individualism in terms of being obsessed by the impression produced in others, as mirrors of the self, have been amplified by the intrusive effects of social media (Codeluppi 2007; Gentili 2014). According to Kato and colleagues (2012, p. 69), social withdrawal "might be an indicator of a pandemic of psychological problems that the global internet-connected society will have to face in the near future. Along this line, Piotti (2020) highlights the role of protection from the outside world that Internet can play in respect to shame defined as a deep feeling linked to the gaze of others, to the imaginary satisfaction. In this sense, internet seems to offer the opportunity to live experiences parallel to the real life and to the fall of cautions, thus allowing the virtual body can do anything the real body cannot even hope for. To author states that hikikomori can be considered as the extreme representatives of a life-style that is becoming universal, so that they could be considered precursors of a *modus vivendi* in which the volume of human relationships has been more and more reducing.

Socially withdrawn youths have been associated with high academic pressure and failure to attain academic and social achievements (Furlong, 2008). Too high academic expectations and competition can lead to crises of confidence in young people when they fail (Lee et al., 2013). Moreover, also school phenomena like bullying may make students resentful and distrustful to their peers (Li, Wong 2015). Therefore, the decision to adhere to a fantasy dimension (such as manga, videogames) seems the only option to be included in social interactions, avoiding the "gaze phobia" (Spiniello et al. 2015).

Beccaria F., Scavarda A., Roggero A., Rabaglietti E.

Some studies report associations between a low psychological wellbeing and the preference for online social interaction, which, in turn, predicted negative outcomes associated with problematic or Compulsive Internet Use (CIU) (Caplan 2003; Van den Eijnden et al. 2008; Nowland et al., 2018). The mental health implications of excessive Internet-browsing, gaming, social networking have been demonstrated in terms of higher depression and stress (Harwood et al., 2014; Teo 2010). The causal nature of the relationship between low psychosocial wellbeing and CIU, however, still needs further investigation, since it may be bidirectional (Meerkek et al. 2010; Nowland et al., 2017). According to some scholars, Internet can be used to escape and cope with daily problems (Orford 2005; Wong 2020) and this could be particularly true for socially withdrawn individuals, because it is a place where the real body is absent or completely transfigured (Spiniello et al. 2015). Young people who experience social marginalization can become attached to online communities to seek solace and solidarity (Wong, 2020).

Finally, differences across cultures are relevant both in terms of risks factors and of behavioral consequences.

In Italy social withdrawal is a recent and fast-growing phenomenon, involving between 60.000 and 100.000 cases since 2010 (Spiniello et al. 2015). Initially social withdrawal has been studied as a consequence of Internet addiction because this condition is often accompanied by the overinvestment on the network, currently, scholars maintain that the abuse of the Internet is linked to social withdrawal as a strategy to survive to an extreme lifestyle (Casale and Fioravanti 2011). However, there is a paucity of literature about it, mostly theoretical books or qualitative studies oriented to underline the role of dysfunctional family dynamics and of individual risk factors in influencing the withdrawal from social life (Spiniello et al. 2015; Sulla et al., 2020). Therefore, more structural and social elements responsible for the widespread increase of the phenomenon are often neglected such as the strain caused by the restricted access to socially approved goals and means (Merton, 1938; Toivonen et al. 2011)

Ricci's comparative study (2014) underlines the differences between Italian and Japanese hikikomori. With respect to Japan, social withdrawal in Italy seems to be more nuanced; acute social withdrawal, which consists in total reclusion at home, is less common than partial social withdrawal, implying a large number of truancies, but the maintenance of a limited social life outside the family (Spiniello et al. 2015). Besides, social withdrawal is often expressed as school phobia and drop-out, often related to the family pressures

(ibidem) and particularly to the model of intensive parenthood, widespread also in Italy (see Naldini 2016; Saraceno 2016; Author B et al., 2021) which prescribes high competences and parents' responsibility for children's educational attainment. Moreover, there is a more common relationship with excessive use of Internet and videogames. The role of the intense bond with the mother, sometimes too strong to enable empowerment, seems to be a common element of Japanese and Italian cases (Ricci 2014). Finally, the most interesting contributing factor is the conflict between the desires and the expectations produced by the ideology of consumption and the actual possibilities of realization, typical of every consumerist society.

The study investigates an adolescent population in Cuneo looking for those risks and protective factors in the area of psychological well-being that can play a role on social withdrawal as well as the perception of the extension of the phenomenon among adolescents and significant adults, perceived quality of relationships with parents and friends and their school experience, time spent online, functions and consequences of the use of digital devices in everyday life and the social withdrawal phenomenon.

Method

Sample

Two distinct samples took part in the study: the first was involved in focus group sessions and the second in a survey.

The first focus group brought together 8 young people, aged 16-18 years (6 females and 2 males) and the second one 12 adults: teachers, parents, social and health professionals, educators, local administrators (7 females and 5 males) recruited through a purposive sampling. The focus group sessions lasted 100 minutes on average.

The survey was administered to all the students attending the second year of Cuneo high school – 10th grade – (high schools/technical and vocational schools). The province of Cuneo is characterized by a young and efficient productive fabric, linked in particular to the food and wine sectors, low youth unemployment, and a high level of social cohesion, due to the presence of small municipalities. According to the sociological literature, these characteristics would make social withdrawal less likely. However, rates of social withdrawal have been steadily increasing in recent years, causing concern among neuropsychiatric departments (source: ASL CN1 data).

The town hosts all different high schools so students come from the valley that surrounds the city. A total of 1,102 out of 1,207 (i.e.: 92% of the population of enrolled students)

filled out the questionnaire; those who did not participate in the survey were either absent from school or their parents did not give them permission to participate in the study. The sample was composed of 45% males and 55% females, aged 13 to 20 years (M=15.21 ± .54); the majority (94%) are of Italian nationality and live with their parents (97%).

The schools included in the sample are heterogeneous. The percentages corresponding to the schools attended, based on the sample size, are as follows: 50% high school, 33% technical school, 17% vocational school, therefore we grouped them in two balanced subsamples: high schools and technical/vocational schools. In Italy, this choice is justified for theoretical and research reasons: each type of school seems to collect students with homogeneous socio-cultural characteristics. In fact, if we were to divide students based on the type of school they pursue and the preparation offered according to the ministerial programs, the result would be the following: those who go into technical and vocational institutes, in theory, should be prepared for early insertion into the working world. Those who join high schools instead, in most cases, postpone their entry into the working world through university studies (Bonino, Cattelino, and Ciarano, 2005; Author D et al., 2008)

Mixed-methods design

This study used a mixed-methods design, a multiple approach in order to have a combination with complementary strengths and not overlapping weaknesses. Qualitative approaches offer in-depth information about a phenomenon, but they may offer information only on a limited number of participants. Quantitative methods, in contrast, allow to engage large samples and then to test the representativeness of the collected information. Therefore, qualitative methods gave in-depth information on the contextual and social factors related to isolation and withdrawal, with a preliminary identification of risk and protective factors. This information was used to structure a questionnaire to analyze the spread increase of the risk and protective factors within a local population of adolescents and to draw out strategies to prevent and tackle the phenomenon.

Qualitative (phase 1) and then quantitative (phase 2) data were collected and analyzed in two consecutive phases: **phase 1** relied on the information provided by adolescents and key informants with the objective of comparing different points of view and perceptions about isolation and social withdrawal. The focus groups were unstructured, in line with the explorative nature of the study, therefore the facilitator was not directive and the discussion was guided by an agenda made up of open-ended questions.

Phase 2 used an online survey aimed at investigating the spread increase of the risk and protective factors, by further studying some areas of the psychological well-being of adolescents through different indicators, related to: the perceived quality of relationships with parents and friends and their school experience. Moreover, other areas we explored were: time spent online, functions and consequences of the use of digital devices in everyday life and the social withdrawal phenomenon. We created the self-report questionnaire with Google Modules, which was then filled out by students in the computer labs of their schools from October to December 2017. The questionnaire was made up of 45 questions from 3 validated scales with a majority of closed-ended answers. Sociologists and Psychologists participated in the construction of the questionnaire.

Measures

The quality of the relationships with the mother, the father and friends was assessed with three different scales, drawn from Inventory of Parent and Peer Attachment (IPPA, Armsden and Greenberg 1987, validated in Italy by San Martini et al. 2009) which has been considered effective to examine perceived parental and peer security (Van der Vost et al. 2006). The relationship with the mother and the father are related to an 11-item scale, representing the quality of communication (e.g. "I share my problems with my mother/father"), feelings of trust (e.g. "My mother/father helps me to know myself better"), and alienation (e.g. "My mother/father has his own problems, then I do not bother him/her with mine"). Respondents rated their relationships on a 4-Likert scale (1=not at all, 4=very well). The full scale has scores which ranges between 11 and 44. The internal consistency of both scales is excellent (Cronbach's α= .85 for the mother's scale and .86 for the father's scale). For the relationship with friends, the 12-item scale presents the same items of the previous scales, plus one (e.g. "My friends accept me for who I am"), therefore the score of the full scale ranges between 12 and 60. The internal consistency is good (present study, α= .80).

Bullying phenomenon: two scales on bullying have been drawn from WHO's Health Behavior in School-Aged Children Study for Italy (Cavallo et al. 2014) which refers to the revised Olweus Bullying-Victim Questionnaire (OBVQ, Olweus 1996), one of the most commonly used research instruments in this domain. The focus on frequency, rather than on severity, is useful to estimate the prevalence of bullying and to identify the most widespread forms of bullying, in order to set priorities for prevention (Solberg and Olweus 2003). The Olweus questionnaire includes two global items (e.g. "How often

have you been bullied at school in the past couple of months?" "How often have you taken part in bullying another student(s) in the past couple of months?"), and several specific questions with five response options: 'never', 'only once or twice', '2–3 times per month', 'once per week' and 'several times per week'. Students who endorse 2–3 times per month or more on two global items are regarded as self-reported victims or bullies, since 2-3 times per month is considered a reasonable cut-off point. Other researchers who investigated the prevalence of bullying with the specific questions from the OBVQ, considered students who endorsed 2–3 times per month on at least one of the items as self-reported victims or bullies (Scheithauer et al. 2006). Therefore, we drew from OBVQ specific questions for the two scales: the first one refers to victimisation and the second one to bullying. As far as victimization is concerned, the 8-item scale covers the seven categories of OBVQ questionnaire plus cyberbullying, according to Berger's revision (2007). It analyses if young people have ever faced such a situation, for example "being insulted and teased" and "being misled by lies or being disdained". Responses ranged from 1 ("never") and 5 ("everyday"), therefore the score of the full scale ranges between 8 and 40 and the internal consistency is good (α= .80). As far as being engaged in bullying behaviour, the same situations of the previous scale have been investigated, with the supplementary item: "Have you ever hit, kicked, pushed or shut-in someone". Responses are "yes" or "no" and the full scale ranges between 0 and 9. The internal consistency is acceptable (α= .70).

Time spent on the Internet: the 6 item-scale on time spent on the Internet, has been drawn from the ESPAD Italy Study (Lupi et al. 2016) which refers to Jia and Jia's study (2009) and to Meerkerk et al.'s (2010) study. Respondents were asked to quantify the hours spent on the Internet, in the last month, considering a typical day: "playing online", "gambling or playing with money", "reading, surfing, searching for information", "downloading music, videos, movies", "searching for, selling and buying products". Responses were 1 ("none"), 2 ("half an hour or less"), 3 ("an hour"), 4 ("2-3 hours") 5 ("4-5 hours") and 6 ("6 or more hours").

The use of social networks: the 8 item-scale on the use of social networks has been drawn from Social Network Survey (Philips and Shibbs 2012). Respondents were asked to specify for which activities they use social networks, for example "to chat with 'friends/users'", "to search for information or Web content". Responses ranged from 1 (never) to 5 (always).

Beccaria F., Scavarda A., Roggero A., Rabaglietti E.
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What young people think about the use of smartphones, tablets, computers and of social networks: as far as the consequences of the use of digital devices are concerned, we asked respondents to choose among three options: "they allow to expand the social network"; "they modify personal relationships in real life", "they hinder the construction of personal relationships".

As far as social networks are concerned, the response options were: "young people give a different self-image", "young people tend to boost their image", "young people are themselves".

The overinvestment of time on the web: two specific scales investigated the excessive use of digital devices: the Compulsive Internet Use scale (CIU, Meerkerk et al. 2010) on the overinvestment of time spent on the web and the scale on the Negative consequences of gaming on laptops, tablets and smartphones. CIU or Internet addiction, as it is sometimes referred to, is considered a pattern of Internet use characterized by loss of control, preoccupation, conflict, withdrawal symptoms, and use of the Internet as a coping strategy. The CIU consists of 14 items on a 5- point scale, but we used a 3-point scale ("never"; "sometimes"; "often") which scores between 0 and 42. The CIU has a high internal consistency (Cronbach's alpha in Meerkek et al. study= .89; in our study= .85). The scale taps on loss of control, preoccupation, conflict, withdrawal symptoms, and coping, with regard to the use of the internet. Sample items are "How often do you find it difficult to stop using the internet when you are online?" and "How often do you feel restless, frustrated or irritated when you cannot use the internet?". Meerkerk and colleagues (2010, 761) established a cut-off point to dichotomize respondents into compulsive and non-compulsive internet users, "this occurs when the behaviour occurs on average more than 'sometimes' which implicates a cut-off score of 14 items × 2 (sometimes) >28.". Since behaviour should play an important role in the life of the Internet user (occurring more than "sometimes") we optioned for a more nuanced strategy based on the same ratio ("compulsive" or "not compulsive"). We created an index of high, moderate and low risk of developing compulsive Internet use. The range was 14-42; on the basis of both Meerkerk et al.'s (2010) cut-off and of the frequency distribution, synthetic indexes have been constructed resulting in the following interpretation: low risk is attributed to young people who scored 14-23, moderate risk to young people who scored 24-33 and high risk to interviewees who scored 34-42.

Beccaria F., Scavarda A., Roggero A., Rabaglietti E.

The negative consequences of gaming on laptops, smartphones and tablets is a scale, drawn from the ESPAD Study/Italy (Luppi et al. 2016) which has been adapted from Holstein and colleague's scale (2014), a short non-clinical measurement tool for perceived problems related to console and computer gaming among adolescents, which showed high face validity and acceptable internal consistency. It is made up of 3 items on a 5-point Likert scale (from 1= "totally disagree" to 5= "totally agree") which scores between 3 and 15. The items are: "I think I spend too much time at playing on console and online games"; "I become upset when I cannot play on console and online games"; "I have been told to spend too much time at playing on console and online games by my parents". Even in this case, we created an index of low scores (between 3 and 6), moderate scores (between 7 and 10) and high risk scores (between 11 and 15) which results in developing negative consequences by playing console and online games.

The social withdrawal phenomenon: a dichotomous item response has been used to assess respondents' knowledge of someone who restricted his/her social contacts, to the point of retreating at home (1=yes; 0=no). In case of affirmative response, young people were asked to identify the reasons of social withdrawal, with a dichotomous item-scale, referred to: "fail to establish social contacts"; "be excluded by peers"; "have trouble in school"; "have family issues"; "be victim of bullying/cyberbullying"; "use videogames or social networks excessively".

*The social withdrawal prevention***:** the topic has been explored with a dichotomous item-scale (1=yes; 0=no) related to different preventive activities, namely "counseling service at school"; "open spaces at school"; "peer to peer initiatives"; "information activities"; "out-of-school meeting places"; "awareness raising initiatives for parents and teachers".

Data Analysis

Data from the survey was analyzed with SPSS statistical package version 24. Chi-Square Test and Anova Test were the main statistical inferential procedures applied, to test the presence of statistically significant differences between subgroups of students, according to gender and type of school (high schools/technical and vocational schools). Moreover, Anova Test was used to test the relationship with the two risk indexes of overinvestment of time on the web and the other indexes created within the study: relationship with the mother, the father and the friends, bullying, school experience.

Both focus groups were audio-taped and transcribed, then coded and analyzed with Atlas.ti, a computer-assisted qualitative data analysis software.

Ethics

The research protocol, the questionnaire and focus group guidelines were written with the social and health professional partners of the project. The research protocol was sent to the school masters in order to obtain the permission to submit the questionnaire to the students. Some schools had to ask for parents' permission while other schools already had a general consent from the parents specific for this kind of study. All interviewees were informed of the research objectives and received assurance that data would remain confidential. Survey participants received parental authorization to fill out the questionnaires, which were anonymous. Focus group participants' names were anonymized and interviewees were advised that they could terminate the discussion at any point.

Results

Focus groups

During the focus groups, both adolescents and adults spontaneously mentioned the controversial role of social networks in social relationships development, highlighting the so-called "shop window effect" (Codeluppi 2007) of social life. For adolescents, the pressures to exhibit and share every social occasion, in order to boost the virtual image, imply the risk of becoming unable to live "here and now".

> *Instagram and Snapchat stories activity (photos and contents that last only 24 hours) makes you often meet friends and do something with them only to exhibit your social life.* (16 year-old adolescent female)

Adults, in line with adolescents, maintained that social networks use entails to be constantly exposed to social judgement; therefore one of the main young people's goals is to gain popularity, no matter how. The use of digital devices is then associated to a greater degree of exposure of private life, shared with a larger group of people than in the past, and to the difficulty of gaining social recognition by the peer group, because of the proliferation of role models.

> *There have been substantial changes in the type of digital tools used as well as in how fast people can be contacted. [...] The concept of group and friendship is different and is far more difficult to be socially recognized by others.* (Educator)

Teachers, educators and parents suggested the presence of a division between adolescents' virtual and real social life, with the first one represented as a sort of parallel universe, characterized by its own rules, languages and profiles.

11

Beccaria F., Scavarda A., Roggero A., Rabaglietti E.

Adolescent focus group participants identified excessive Internet use as a recurring element in the experiences of socially withdrawn friends and acquaintances. The latter are often portrayed as gamers who spend afternoons behind the screen, playing videogames, also simultaneously with other players. They progressively restrict social life because of their perceived diversity from valued and mainstream role models and lack of self-confidence, which makes socializing difficult and painful.

> *If they do not appear as cool guys, then it is hard for them to interact with peers and it is easier to do it behind a computer (Int. 7- male adolescent, 17 years old).*

They can also be victims of bullying, manifested as acts of harassment carried out by a group of classmates, who exclude those who are considered to have peculiar lifestyles. Social networks, for some interviewees, could strengthen their understanding of social standards.

> *Now we tend to be homogenized, thanks to the social networks too: they outline a female/male model to which you have to conform, otherwise you are an outcast.* (17 year-old adolescent female)

Adult focus group participants reported situations of partial social withdrawal too, as cases of early school leaving correlated to an excessive use of videogames. Therefore, they confirmed adolescents' representation of socially withdrawn young people, but they focused more on family causes. Positive family relationships are represented as a protective factor of social withdrawal, whereas dysfunctional family dynamics are considered risk factors.

Adolescents' focus on peer relationships and adults' focus on parents and teachers' relationships, are viewed within a context of prevention: adults mentioned awareness raising projects for parents and teachers, whereas adolescents suggested student-led initiatives and information activities.

Survey

The perception of school experience and bullying phenomenon. The majority of the adolescents reported positive school experiences: almost 80% of them like going to school very much, even if the same percentage finds it stressful, particularly girls (M-F: $\chi^2=21.87$, $p<.0001$) and high school students (high school and vocational schools: $\chi^2=23.49$; $p<.0001$). A 35% of adolescent females is highly stressed by school workload, whereas only 23% of adolescent males feels the same pressure; parallel to this, 35% of high school students and 23% of vocational students feel greatly stressed by school.

The relationships with teachers and peers show a similar multi-faceted picture: almost 90% feel accepted by their classmates, boys more than girls, but only 67% consider themselves to be treated by teachers in the right way, whereas students from vocational schools are more dissatisfied with their teachers.

The type of school matters (Chi-square=9.12; df=3; p=028): 35% of vocational students maintained that teachers do not treat them in a fair way, whereas only 30% of high school students agreed with this statement.

In line with the qualitative results, the quality of the relationships at school has also been analyzed with regard to the level of increase in bullying. Overall, the phenomenon is not so spread, both in terms of being directly or indirectly exposed to acts of violence or harassment, and in terms of carrying them out. We focused our attention on the victimization scale, since it is correlated with social withdrawal, according to the literature (Ricci 2014; Spiniello et al. 2015). The mean value of the victimization is 15, in a range between 8 and 40, therefore the majority of the respondents scored below level 3 ("to be considered victims of bullying"). However, when reviewing it in more detail, many respondents were familiar with the victimization problem caused by being bullied: almost 19% of the interviewees reported being disdained, 15% being insulted and teased, 14% being excluded from the peer group and 7% being bullied or cyberbullied on a regular basis. As focus group participants stated, religion, nationality and sexual orientation do not seem to be associated with aggression or exclusion, since episodes related to them are rarely mentioned.

Family and friends: the relationship with significant others. In line with the good relationships reported with classmates, interviewees are generally satisfied with their friendships: about 65% of the respondents considers friends as helpful in order to know themselves better; 89% feels accepted and 84% perceives their friends respect their feelings. However, even in this case contradictions can coexist: almost 30% of the adolescents maintain that they do not talk with friends about their personal problems and the same percentage is indifferent to the quality of relationships with peers. Adolescent females expressed a statistically significant higher level of satisfaction related to friendship than adolescent males: in a range between 12 and 60, the mean value for adolescent females was 49, for adolescent males was 46.

The quality of the relationship with parents is equally strong, both with the mother and with the father, even when assessed separately and with the same scale: only 18% of the

interviewees expressed dissatisfaction in this domain. In a range between 11 and 44, mean values for adolescent females is 32.88 with the mother and 30.09 with the father, for adolescent males, mean values are respectively 34.04 and 32.77.

The role of Internet and social media. Adolescents are used to spending a great share of their spare time online, searching for information, downloading multimedia content, and, above all, using social networks, particularly Instagram and Snapchat. Social networking is an everyday activity for the majority of the survey respondents, which takes between 1 to 3 hours a day for half of the sample and between 4 and 6 hours for 40% of the students. A factorial analysis on the 8 items, with the Varimax method, revealed the presence of two components, with a good proportion of variance explained (58%). The first component is explained by "chatting with friends/users", "sharing information or Web content", "knowing the opinion of other users", "expressing his/her own opinion", "observing/knowing what the other users are doing", "searching for information or Web content", being defined as "expressive/social use of social networks". The second component is explained by "playing online games with other players" and by "playing online alone", being defined as "recreation use of social networks". Even if the expressive use of social networks is more widespread in the sample, adolescent females present significantly higher mean values than adolescent males (in a range between 6 and 30, adolescent females' means are 22, and adolescent males' 20). Adolescent males, on the contrary, are more keen on recreational use of social networks than adolescent females (in a range between 2 and 10, adolescent males' mean value is 6, adolescent females' 4.4).

The excessive use of digital devices. The two risk indexes on the excessive use of Internet and videogames outlined a quite problematic situation. The first index, "overinvestment of time on the Internet", shows that 45% of the adolescents are at moderate and at high risk of developing an overinvestment of time online (41% at moderate risk and 4% at high risk).

In addition, 38% of the respondents who said they were playing, are at moderate risk and 16% at high risk of incurring in the negative consequences of gaming.

Adolescent females are more exposed to the moderate risk of overinvesting time online than boys (p =.000), indeed, girls also spend a larger share of time on social media, but they are more critical about their consequences on building relationships in real life: social networks modify or rather hinder personal relationships for almost 40% and 30%

of female respondents. The differences between mean values of males and females are statistically significant (Chi Square=6.98, df=2; p = .030) (Tab. 1).

Insert table 1

Beyond gender differences, 95% of the respondents stated that the virtual self-image does not correspond to the real one, because young people tend to enhance or change it on social media.

The risk and protective factors of the excessive use of digital devices. In order to assess the presence of a relationship between the overinvestment of time on the web and on digital devices and the psychosocial factors investigated within the survey, we did Anova analysis between the two indexes and the relationships with the mother, the father, friends, bullying phenomenon and the two types of use of social networks.

In line with focus groups' results, young people with a lower risk of overinvesting time on the web reported more positive relationships with the mother, the father and the friends than young people with a higher risk of overinvesting time on the web. Moreover, young people with a lower risk of overinvesting time on the web have a more positive perception of school experience and a lower level of stress related to school activities. This situation is coherent with the bullying phenomenon, because young people who are more engaged in bullying activities or who have been victims of them present a higher risk of overinvesting time on the Internet. Finally, high risk of overinvesting time on the web is related to the "expressive/social use of social networks" (Tab. 2).

Insert table 2

Concerning the negative consequences of online and console playing, positive relationships with the mother and the friends are still a protective factor, related to a lower risk, whereas a positive relationship with the father is associated with a moderate risk in incurring in these consequences. Students who reported a positive perception of school experience presented also a lower risk of developing negative consequences of gaming. Stress related to school activities is not significantly related to the risk index. Finally, in line with qualitative findings, students with a higher risk of developing negative

consequences of gaming were also more engaged in bullying episodes, both as victims and as bullies, and reported a recreational use of social networks (Tab. 3).

Insert table 3

Social withdrawal phenomenon and how to prevent it. A 35% of the survey respondents, particularly adolescent males, from both types of schools, know someone who has a restricted social life, which may include a complete retreat from the rest of the world by staying at home. Differences between males and females are statistically significant (Chi Square = 18.6; df=1, p<.0001).

According to the adolescents, the reasons of social withdrawal are the failure to conform to the cultural norms of appearance (beauty, outfit, social life) or better to the norms of presentation of self, bullying episodes, the lack of stable role models in the family, the psychological vulnerability of the individuals. 70% of respondents mentioned the excessive use of Internet and videogames, as a contributing factor to the loss of interest in social relationships.

Discussion

The current study aims to highlight a multi-faceted picture related to risk and protective factors that can foster or hinder social withdrawal phenomenon and contributes to its understanding. The mixed methods approach allowed to triangulate and expand findings, and to highlight contradictions.

Social withdrawal is not a widespread phenomenon within the social groups of the young people and the adults involved in the study. In fact, partial and total social withdrawal cases, even if associated to dysfunctional family dynamics and individual psychological problems, as previous research underlined (Spiniello et al. 2015; Li and Wong 2015) seem to be also influenced by more structural social and contextual factors (Norasakkunit and Uchida 2012; Furlong 2008).

Furlong's (2008) theoretical assumptions, then, can be partially confirmed by our empirical study: the effects of non linear and individualized transitions, paralleled with an increasing level of social insecurity, have been clearly highlighted by our findings. We found both qualitative and quantitative evidence about the main social mechanisms at the basis of isolation and withdrawal: the pressures to be competitive and successful in every adolescent's life context (school, social life, bodily appearance) and the inability to face

failure (Lee et al. 2013). Consistent with Mark Wong (2020) claim, online interactions can be a form of response from young people to mitigate experiences of marginalization and increased precariousness of work and education in the 21st century. Specifically, the failure to conform to cultural norms of appearance on the one hand, and to school performance, on the other hand, seems to be the two sources of stress and of social disapproval for adolescents. As Carla Ricci stated (2014) the inner conflict of the ideology of consumption, in terms of unlimited desires and limited possibilities of fulfillment has an impact on the construction of young people's identity. Young people who feel unable to keep up with these standards; thus have no choice but to withdraw fromcompetition, by refusing to attend school and ceasing to interact face-to-face with others, i.e., in the face of these pressures, they choose the path of withdrawal in order to conform, rejecting both social goals and accepted means to achieve them (Merton, 1938). However, the Merton's theory of strain applied to understanding social withdrawal, can benefit from more recent developments that have added a social-psychological level to Merton's focus on social and cultural structures. This considers that tension can arise from the fact that failure to achieve positively valued goals is compounded by an inability to escape painful personal situations (Agnew 1992).

Bullying seems to act as a sort of reinforcement element, being quite widespread and oriented towards young people who differ from mainstream role models, more than towards people with different ethnic and religious background, or sexual orientation. In addition, social media seems to have a fundamental role in strengthening social standards, specifically female and male role models, by producing a constant exposure to social judgment. Social networks expand the audience for the presentation of self in everyday life, hindering the extent to which someone can control how much they may be able to impress other individuals (Hogan 2010; Zucchetti et al. 2013). The aim of becoming popular on social media is a far reaching objective, which improves the competitiveness between young people, pressuring them to be engaged in extreme behavior (even bullying) and to face wider consequences of their actions (Caplan 2003; Van den Eijnden et al. 2008; Nowland et al., 2017). Participants are partially in line with this statement, even if so pervasive in everyday life, social networks use is also the object of criticism by survey respondents and adolescent focus group participants, which expressed the same worries about the clash between real and virtual life.

Beccaria F., Scavarda A., Roggero A., Rabaglietti E.

The study suggests that the engagement in online activities may undermine the participation in offline social life. The two indexes of overinvestment of time on the web and on negative consequences of playing online and console games presented a quite problematic situation. Moreover, people who are at higher risk of developing an excessive use of digital devices are more likely to be engaged in the bullying phenomenon, to be more dissatisfied by teachers and classmates' relationships, to perceive family and friends' relationships less positively. At the same time, social/expressive use of social networks is associated with an overinvestment of time on the web, while recreational use of social networks is related to excessive gaming.

In line with Spiniello and colleagues' study (2015) the web, where young people spend a great share of their time, could represent the shelter of socially withdrawn individuals, a place to join social interactions, with the possibility of choosing between different profiles and identities. The vicious cycle highlighted by some studies, in terms of an association between poor psychological wellbeing and the preference for online interaction, which, in turn, predicted negative outcomes associated with problematic or compulsive Internet use (Caplan 2003; Gross et al. 2002; van den Eijnden et al. 2008; Wong, 2020), seems to be confirmed by our study. It is extended not only to vulnerable people, but also to a larger part of the population. Considering the wide effects of the identified social mechanism at the basis of exclusion and the everyday frequency of social networking, the phenomenon will probably increase in the near future.

Risk factors (bullying, overinvestment of time on the web, negative school experience) are quite clear, whereas protective factors are less undeniable, since only a positive relationship with friends and with the mother is mentioned in focus groups and is related to a low risk of excessive use of digital devices. However, the intense bonds with the mother are considered one of the main contributing factors of social withdrawal (Ricci, 2014) and the suggestions about prevention priorities are oriented to the involvement of all significant others, through students' initiatives and information activities.

Conclusion

The study highlights some areas of concern. Negative school experience, excessive use of digital devices and bullying are widespread in our sample. These are important signals, which, in speculative terms, could be configured as risk factors for social withdrawal among adolescents. Overinvestment of time on the Internet is a harbinger of social isolation, as a strategy to cope with social pressures, with the effect of avoiding to face

them and producing negative consequences in real life. The identification of protective factors is more controversial, however the findings demonstrate that school is an important context both for an early identification and to face the phenomenon when the first alarm appears, and teachers and schoolmates can be committed to detect and bring to light the worrying signs. One of this is undoubtedly the difficulty in disconnecting from online activities, gaming and social networks, taking time out for offline social and recreational activities. The majority of the interviewees, when referring to cases of social isolation and disengagement, mentioned the excessive use of videogames and digital devices as a contributing element.

Raising awareness about the phenomenon is crucial, both through student initiatives, i.e. peer education projects, aimed at preventing young people's anti-social behavior and improving their social skills, and involving parents and teachers.

This study had some limitations that need to be mentioned. First the cross-sectional design precluded the exploration over time of the protective and risk factors on possible social withdrawal paths among adolescents. Second the questionnaire and the focus group directly address the topic of social withdrawal only in limited sections, focusing more on risk and protective factors. Despite the limitations mentioned, findings indicate the need to plan student initiatives to promote and empower psychological and socio-emotional wellbeing, and get adolescents away from situations of risk of social withdrawal.

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

References

Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology*, *30*(1), 47–87.

Armsden, G. C., Greenberg, M. T. (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(5), 427-454, https://doi.org/10.1007/BF02202939.

Beccaria F., Scavarda A., Roggero A., Rabaglietti E.
Modern Italy (accepted March 2022)

Author B et al. (2021) ……………………………………………………………….

Author D et al. (2008) ....

Berger, K. S. (2007). Update on bullying at school: Science forgotten?. *Developmental review*, 27(1), 90-126.

Bonino, S., Cattelino, E., Ciairano. (2005). Adolescents and risk: Behavior, functions, and protective factors). New York, Milan: Springer.

Caplan, S. E. (2003). Preference for online social interaction: A theory of problematic Internet use and psychosocial well-being. *Communication research*, 30(6), 625-648, https://doi.org/10.1177/0093650203257842.

Casale, S and Fioravanti, G. (2011) Psychosocial correlates of internet use among Italian students, *International Journal of Psychology*, *46*(4), 288-298.

Cavallo, F., Lemma, P., Dalmasso, P., Vieno, A., Lazzeri, G., Galeoni, D. (2014). *Report nazionale dati HBSC (Health Behaviour in School Aged Children) Italia 2014.* World Health Organization, Cross National Study. http://www.hbsc.unito.it/it/index.php/pubblicazioni/reportnnazionali.html.

Chan, G.H.Y. and Lo T.W. (2013). Quality of life of the hidden youth in Hong Kong, *Applied Research in Quality of Life*, 9: 951–969.

Codeluppi, V. (2007). *La vetrinizzazione sociale. Il processo di spettacolarizzazione degli individui e della società*. Torino: Bollati Boringhieri.

Cole, L.E. (2013). Japanese Culture-Bound Disorders: The Relationship between "Taijin Kyofusho, Hikikomori," and Shame. *Online Submission*. https://eric.ed.gov/?id=ED541434

De, F.M., Caredda, M., Delle, R.C., Salviati, M., & Biondi, M. (2013). Hikikomori (ひきこもり): a culture-bound syndrome in the web 2.0 era. *Rivista di psichiatria*, *48*(4), 354-358, doi:10.1708/1319.14633

Furlong, A. (2008). The Japanese hikikomori phenomenon: acute social withdrawal among young people. *The sociological review*, *56*(2), 309-325, https://doi.org/10.1111/j.1467-954X.2008.00790.x.

Furlong A, Goodwin J, O'Connor H, et al. (2018) *Young People in the Labour Market*. Oxon: Routledge.

Gentili, L. (2014). *Homo mediaticus: mass media e culto dell'immagine*. Roma: Armando Editore.

Beccaria F., Scavarda A., Roggero A., Rabaglietti E.
Modern Italy (accepted March 2022)

Gross, E. F., Juvonen, J., & Gable, S. L. (2002). Internet use and well-being in adolescence. *Journal of social issues*, *58*(1), 75-90, https://doi.org/10.1111/1540-4560.00249.

Harwood, J., Dooley, J. J., Scott, A. J., & Joiner, R. (2014). Constantly connected–The effects of smart-devices on mental health. *Computers in Human Behavior*, *34*, 267-272, https://doi.org/10.1016/j.chb.2014.02.006.

Hogan, B. (2010). The presentation of self in the age of social media: Distinguishing performances and exhibitions online. *Bulletin of Science, Technology & Society*, *30*(6), 377-386, https://doi.org/10.1177/0270467610385893.

Holstein B. E., Pedersen T. P., Bendtsen P., Madsen K. R., Meilstrup C. R., Nielsen L., Rasmussen M. (2014). Perceived problems with computer gaming and internet use among adolescents: measurement tool for non clinical survey studies. *BMC public health*, *14*(1), 361.

Jia, R., Jia, H. H. (2009). Factorial validity of problematic Internet use scales. *Computers in Human Behavior,* 25, 1335–1342, https://doi.org/10.1016/j.chb.2009.06.004.

Kato, T.A., Shinfuku N., Sartorius N., Kanba S. (2011). Are Japan's hikikomori and depression in young people spreading abroad? *The Lancet, 378*(9796), 1070. DOI:10.1016/S0140- 6736(11)61395-0

Kato, T.A., Tateno, M., Shinfuku, N., et al. (2012) Does the 'hikikomori' syndrome of social withdrawal exist outside Japan? A preliminary international investigation. *Social Psychiatry & Psychiatric Epidemiology*, 47(7), 1061-1075. DOI:10.1007/s00127-011-0411-7.

Koyama A, Miyake Y, Kawakami N, et al. (2010) Lifetime prevalence, psychiatric comorbidity and demographic correlates of 'hikikomori' in a community population in Japan. *Psychiatry Research*, 176: 69–74.

Lassiter, C., Norasakkunkit, V., Shuman, B., & Toivonen, T. (2018). Diversity and resistance to change: Macro conditions for marginalization in post-industrial societies. *Frontiers in psychology*, *9*, 812. https://doi.org/10.3389/fpsyg.2018.00812.

Lee YS, Lee JY, Choi TY, et al. (2013) Home visitation program for detecting, evaluating and treating socially withdrawn youth in Korea, *Psychiatry and Clinical Neurosciences*, 67: 193–202.

Beccaria F., Scavarda A., Roggero A., Rabaglietti E.
Modern Italy (accepted March 2022)

Li TMH, Liu L and Wong PWC (2018) Withdrawal experience and possible way-outs from withdrawal behaviour in young people. *Qualitative Social Work,* 17(4): 597–555.

Luppi C., Benedetti E., Molinaro S. (2016). I dati sul consumo di sostanze e sui comportamenti a rischio nella popolazione studentesca. Espad Italia 2016. Pisa, Consiglio Nazionale delle Ricerche, IFC-Istituto di Fisiologia Clinica, http://www.espad.org

Malagón-Amor, Á., Córcoles-Martínez, D., Martín-López, L. M., & Pérez-Solà, V. (2015). Hikikomori in Spain: a descriptive study. *International Journal of Social Psychiatry*, *61*(5), 475-483, https://doi.org/10.1177/0020764014553003.

Meerkerk G.J., Van den Eijnden R.; Franken I., Garretsen H.(2010). Is compulsive internet use related to sensitivity to reward and punishment, and impulsivity? *Computers in Human Behavior*, 26,729–735, https://doi.org/10.1016/j.chb.2010.01.009.

Merton, R. K. (1938). Social structure and anomie. *American sociological review*, *3*(5), 672-682.

Naldini M., a cura di (2016). *La transizione alla genitorialità. Da coppie moderne a famiglie tradizionali*. Bologna: Il Mulino.

Norasakkunkit, V., & Uchida, Y. (2012). Marginalized Japanese youth in post-industrial Japan: Motivational patterns, self-perceptions, and the structural foundations of shifting values. Tromsdorff, G. & Chen, X. (eds) *Values, religion, and culture in adolescent development,* Cambridge: Cambridge University Press.

Nowland, R., Necka, E. A., & Cacioppo, J. T. (2018). Loneliness and social internet use: pathways to reconnection in a digital world?, *Perspectives on Psychological Science*, *13*(1), 70-87.

Olweus, D., (1996). *The revised Olweus Bully/Victim Questionnaire*, Bergen: Research Center for Health Promotion.

Orford, J. (2005). *Problem gambling and other behavioural addictions (internet)*. London: Foresight, Government Office for Science, Department of Innovation, University and Skills.

Ovejero, S., Caro-Cañizares, I., de León-Martínez, V., & Baca-Garcia, E. (2014). Prolonged social withdrawal disorder: a hikikomori case in Spain. *International*

Beccaria F., Scavarda A., Roggero A., Rabaglietti E.
Modern Italy (accepted March 2022)

Journal of Social Psychiatry, *60*(6), 562-565, https://doi.org/10.1177/0020764013504560.

Phillips B., Shipps B. (2012). Frequency of usage: the impact of technology acceptance factors versus social factors. *International Journal of Virtual Communities and Social Networking (IJVCSN)*, *4*(2),30-45, doi: 10.4018/jvcsn.2012040103.

Piotti, A. (2020). La dimensione Hikikomori. Effetti del virtuale nel ritiro sociale, *Psiche*, 1,123-133.

Ranieri, F., Andreoli, M., Bellagamba, E., Franchi, E., Mancini, F., Pitti, L., Sfameni, L. & Stoppielli, M. (2015). Hikikomori and intercultural manifestations: A bibliografic review. *European Psychiatry*, *30*, 573, https://doi.org/10.1016/S0924-9338(15)31913-1.

Ricci, C. (2014). *La volontaria reclusione. Italia e Giappone. Un legame inquietante*. Roma: Aracne

Saitō, T. (1998). *Shakaiteki hikikomori: owaranai shishunki*. Tokyo: PHP Kenkyujo.

Saitō, T., & Angles, J. (2013). *Hikikomori: adolescence without end*. Minneapolis, University of Minnesota Press

Sakamoto, N., Martin, R. G., Kumano, H., Kuboki, T., & Al-Adawi, S. (2005). Hikikomori, is it a culture-reactive or culture-bound syndrome? Nidotherapy and a clinical vignette from Oman. *The International Journal of Psychiatry in Medicine*, *35*(2), 191-198, https://doi.org/10.2190/7WEQ-216D-TVNH-PQJ1.

San Martini P., Zavattini G.C., Ronconi S. (2009). L'inventario per l'attaccamento ai genitori ed ai pari (IPPA: Inventory of Parent and Peer Attachment). Un'indagine psicometrica su un campione italiano di adolescenti. *Giornale italiano di Psicologia*, doi: 10.1421/29288.

Saraceno C. (2016). *Mamme e papà. Gli esami non finiscono mai*. Milano: Feltrinelli.

Scheithauer, H., Hayer, T., Petermann, F. and Jugert, G. (2006). Physical, verbal, and relational forms of bullying among German students: Age trends, gender differences, and correlates. *Aggressive Behavior*, 32: 261–275, https://doi.org/10.1002/ab.20128.

Solberg, M., & Olweus, D., 2003. Prevalence estimation of school bullying with the Olweus Bully/Victim Questionnaire. *Aggressive Behavior*, 29: 239–268, doi.org/10.1002/ab.10047.

Beccaria F., Scavarda A., Roggero A., Rabaglietti E.
Modern Italy (accepted March 2022)

Spiniello, R., Piotti, A., & Comazzi, D. (2015). *Il corpo in una stanza. Adolescenti ritirati che vivono di computer: Adolescenti ritirati che vivono di computer*. Milano: Franco Angeli.

Sulla, F., Masi, A., Renati, R., Bonfiglio, N. S., & Rollo, D. (2020). A Tool for the Evaluation of Hikikomori Risk in Italian Adolescents: A first Contribution to its Validation. In *2020 IEEE International Symposium on Medical Measurements and Applications (MeMeA)* (pp. 1-5) IEEE.

Teo, A.R. (2010). A new form of social withdrawal in Japan: a review of hikikomori. *International journal of social psychiatry*, *56*(2), 178-185, https://doi.org/10.1177/0020764008100629.

Toivonen T., Norasakkunkit V., Uchida Y. (2011). Unable to conform, unwilling to rebel? Youth, culture, and motivation in globalizing Japan. Frontiers Psychology*, 2,* 207. doi.org/10.3389/fpsyg.2011.00207

van den Eijnden, R. J., Meerkerk, G. J., Vermulst, A. A., Spijkerman, R., & Engels, R. C. (2008). Online communication, compulsive Internet use, and psychosocial well-being among adolescents: A longitudinal study. *Developmental psychology*, 44(3), 655, https://doi.org/10.1037/0012-1649.44.3.655.

van der Vorst, H., Engels, R. C., Meeus, W., & Deković, M. (2006). Parental attachment, parental control, and early development of alcohol use: A longitudinal study. *Psychology of addictive behaviors*, *20*(2), 10, https://doi.org/10.1037/0893-164X.20.2.107.

Wong, M. (2020) Hidden youth? A new perspective on the sociality of young people 'withdrawn' in the bedroom in a digital age, *New Media & Society*, 22(7), 1227-1244.

Zielinziger, M. (2006). *Non voglio più vivere alla luce del sole. Il disgusto per il mondo esterno di una nuova generazione perduta*. Roma: Elliot Edizioni.

Zucchetti, G., Giannotta, F., Rabaglietti, E. (2013). Online and offline friendship among Italian adolescent girls following a non traditional school tracks. *Scandinavian Journal of Child and Adolescent Psychology and Psychiatry*, *1*(1*), 24-32.* DOI: https://doi.org/10.21307/sjcapp-2013-004