

The growing environment on Chinese adolescents' non-suicidal self-injury: a parents-reported qualitative study

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Abstract

Background: Non-suicidal self-injury (NSSI) is prevalent in adolescents and brings a series of serious consequences to their well-being. Previous studies indicated that the growing environment has a significant impact on adolescents with NSSI, which is little known about the Chinese adolescents. The study aims to investigate the growing environment of Chinese adolescents with NSSI and explore the target of intervention in the growing environment of adolescents with NSSI.

Methods: The participants are parents of adolescents with NSSI who responded to a study advert, which was distributed in the psychological ward in China. Semi-structured interviews were conducted and their responses were analyzed by the thematic analysis.

Results: 20 participants (16 were mothers, and 4 were fathers) completed the interview. Four themes were identified: Parenting style, Family function, Peer interaction, and Psycho-behavioral factors as well as 14 subthemes.

Conclusion: Parents-report demonstrated a series of problems, consisting of Inappropriate parenting style, invalid family function, negative interaction of peer and problematic behavioral factors, etc. This highlight increasing awareness was needed to seek some intervention in the aspects of a growing environment for them.

1. Background

Non-suicidal self-injury (NSSI), also named as deliberate self-injury, refers to a self-injury behavior that is intentional, unsanctioned by society, and not intended for suicide^[1]. Common forms of NSSI include cutting, burning, scratching, pinching, biting and poisoning, etc., and it is considered a way to relieve negative emotions^[2]. NSSI can occur in any group, including adolescents, college students, patients with mental disorders, etc. However, it is most common among adolescents and the onset of NSSI is between 12 and 15 years old^[3]. The global prevalence of NSSI among adolescents is about 17% in non-clinical samples^[4], and with most cases among females^[5]. In China, the prevalence of NSSI is higher, which has reached 17.0%-29.2% in different community samples^[6]. NSSI brings a series of serious consequences, including permanent scars, rejection by peers, academic difficulties, risk of suicide, etc.^[7, 8]. Compared to the experience of previous suicides, NSSI is more predictive for future suicide^[9]. Although the effectiveness of some interventions for NSSI has been demonstrated, consisting of dialectical behavioral therapy, cognitive behavioral therapy, and psychology-based theory^[10], the treatment is limited^[11]. Therefore, the NSSI of adolescents has become a serious public health problem.

Previous studies have indicated that the onset of NSSI behavior is the result of a combination of factors^[12], and the factors of NSSI can be divided into two basic aspects^[13]. The first one is the individual factors, including emotional regulation, psychiatric disorders, etc. Besides, the environmental factors, such as family environment, school environment and other social environments, also play an important

role in the onset of NSSI. There are some theoretical models for explaining the role of environmental factors in the onset of NSSI were proposed^[14]. The behavior/environment model summed up some external factors affecting the onset of adolescents' NSSI behavior, and emphasized the role of family environment, adverse life events and peer influence. In line with the model, prior work also have demonstrated the family relationship, peer victimization of teenagers had a great impact on NSSI^[15, 16]. Parent connectedness is a protective factor for adolescents with NSSI^[17]. Parents are the main caregivers of adolescents. In this sense, Interviews with parents can further understand the growing environment of teenagers. However, there is little study to explore the growing environment of adolescents with NSSI from the parents' perspective, especially in China.

Different from western culture, Chinese culture has its particularity and historicity. In China, due to the rapid development of economy, the people's living standards are also improving. Numerous intellectuals occupy a leading position in social distribution. Education is regarded as a kind of capital. Hence, only by learning can make the family prosper. It leads to increasing pressure on teenagers, including peer competitive pressure, enrollment pressure and pressure from families. Moreover, adhered to the traditional Chinese virtues, the family's affectional tie of Chinese has persevered for thousands of years, which leads to the relationship between children and parents or grandparents is close. Due to the influence of Chinese culture, the growth environment of teenagers is special, which is worthy of our attention.

In this paper, the research intends to fill some gaps. Firstly, the study is parents-reported, that is all the growing experience of adolescents with NSSI stated by father or mother. Secondly, in order to understand some complex processes, qualitative research is the most appropriate method. Finally, the study aims to find some key targets for intervention and is expected to provide directions and suggestions for the follow-up intervention in adolescents and parents.

2. Methods

2.1 Participants

Purposive sampling was used in the study. Parents of adolescents with NSSI were recruited from the psychological ward of a tertiary hospital in China. At the same time, the informed consent forms were provided. The inclusion criteria are as follows: 1) have a child between 12–18 years old, who is with NSSI in the past 6 months and without psychotic features; 2) is able to complete the interview; 3) with normal intelligence and without any mental disorders. If parents are willing to participate in the study, they will have a month to call the researchers by telephone, and the clinical data of their children will be checked. Whether adolescents have NSSI behaviors was determined by the clinical data recorded by doctors when they first consult with them, including cutting wrists and thighs with knives and other sharp objects, poisoning, and other behaviors, which can hurt their bodies.

In total, 20 participants completed the interview, consisting of 15 adolescents diagnosed with non-psychotic major depression, 3 adolescents with non-psychotic bipolar disorder and 2 adolescents with adolescent mood disorder according to the ICD-10. As seen in Table 1, the mean age of the children is 14.5 (2.0; 12–18) who are mainly girls, and 80% of the interviewee was mothers. Most of them live in towns or cities, and junior high school students and high school students account for half, respectively. The education level of half parents is above high school. Table 2 showed the basic information of the children of participants. It was found 80% of adolescents have one or more siblings, and 40% and 70% have the experience of transferring to another school and peer victimization, respectively.

The study, conducted from August 2019 to November 2019, has been approved by the Medical Ethics Committee of the Second Xiangya Hospital of Central South University. All participants have been informed of the purpose, methods, and privacy of the study and have signed informed consent forms.

Table 1
Participant characteristics

Items	Number of cases (ratio)
Age, years of child	14.5(2.0;12–18)
Diagnosis of child	
Depression	15(75%)
Bipolar disorder	3(15%)
Mood disorder	2(10%)
Gender of child	
Female	17(85%)
Male	3(15%)
Gender of Interviewee	
Female	16(80%)
Male	4(20%)
Han nationality	20(100%)
Residence	
City	14(70%)
Countryside	6(30%)
Education of child	
Middle school	10(50%)
High school	10(50%)
Education of father	
Below high school	6(30%)
High school	4(20%)
Above high school	10(50%)
Education of mother	
Below high school	4(20%)
High school	4(20%)
Above high school	12(60%)

Table 2
Basic Information

Items	Number of cases (ratio)
Marital status of participants	
Married.	14(70%)
Divorce.	5(25%)
Bereavement	1(5%)
Number of children	
Zero	4(20%)
One	12(60%)
Two	1(5%)
Three	3(15%)
Experience of transferring to another school of children	
Yes	8(40%)
No	12(60%)
Experience of peer victimization of children	
Yes	14(70%)
No	6(30%)

2.2 Procedures

An in-depth, Semi-structured separate interview was conducted in the psychological interview room of the ward and all the participants' children are inpatients. In the study, participants can obtain an in-depth interview, a psychological consultation, and a crayon as a gift. The outline of the semi-structured interview was composited from the literature and after discussing with psychiatrists and psychiatric nurses who had treated adolescents with NSSI. Finally, after consulting the qualitative research experts, the outline of the interview was confirmed. It consists of 13 topics, some of which are as follows: 1) who is the primary caregiver of your child at the age of 0–3 years old? 2) What role do you play in the growth of your child? 3) How close are you to your child? 4) Do you and your spouse fight or quarrel with your children's faces? 5) How do you and your spouse usually educate your children? 6) How are the children getting along with other students at school? Did any of their classmates bully or tease him/her? 7) Does your child like to express himself/herself? How does he/she usually deal with his/her emotions? 8) When was the last time you had a heart-to-heart talk with your child? Each interview lasts 40 to 50 minutes. All the interviews were audio-recorded.

3. Data Analysis

Within 48 hours of each interview, two researchers converted the recording into text and code the data, separately. One researcher has a background of the qualitative research, and the other has a background of psychiatry. The general information was extracted in the form of a table. Data coding was performed in the NVivo 11. Thematic analysis was used and followed the six-step process by Braun and Clarke^[18]. Sub-themes are formed by extracting the nodes repeatedly. After several discussions, the two researchers finally reached a consensus of the sub-themes, which were agreed by all staff at the author's meeting.

4. Results

Through the theme analysis, 4 themes and 14 sub-themes were extracted: (1) Parenting style; (2) Family function; (3) Peer interaction; (4) Psycho-behavioral factors.

Theme 1: Parenting style

Sub-theme 1: Parents' authoritarian

Parenting style (theme; figure) has a great influence on the growth of adolescents in China. Parent's authoritarian (Sub-theme) refers to parents according to their own experience and will, force teenagers to live and study go their way, and have a set of requirements.

"My wife is very aggressive, like a 'superwoman'. She always educates children based on some of her experiences and is very strict with children's study and life. In addition, she is very demanding on children and has own set of standards." (Participant 5)

"She felt that her father and her grandparents were the same, that is, to compel them. Everything was imposed on her by their will." (Participants 19)

When children have bad behavior that their parents think, such as fall behind in the study, poor living habits, etc., parents usually beat or scold to them.

"Her father would hit her. So she's still scared of his dad."(Participant 7)

In addition, parent's authoritarian reduces the intimacy of adolescents and parents. They may have a feeling of hatred towards their parents. Some teenagers were even afraid to rebel against their parents and are less likely to talk to their parents about their own life events and troubles or difficulties and look for other ways or just keep the emotions in mind.

"The child and we were very close to each other, but slowly alienated. He is a few hateful parents because his mother is too strict with him." (Participant 5)

"After having his own room, he locked the door every day, stayed alone. We also did not feel any emotions, such as angry or something. He just puts his emotions in his heart, does not say it."(Participant

3)

Sub-theme 2: Father's co-parenting

In China, mothers play a major role in educating and raising children, while fathers play an assisting role. Father's co-parenting (sub-theme) is very common in the family. Nevertheless, most fathers' education mode are not in line with mothers'.

"My husband and I are the opposite of character, he is very grumpy, and his education mode is different from mine. When conflicts with others" (Participant 13)

Some fathers work away from home to make money and rarely get along with children. They don't know how to educate children and are impatient to children. Meanwhile, they are irascibility and don't understand children.

"Her father has been working outside to earn money. He is so grumpy that he always scolds children and breaks things." (Participant 1)

"She didn't get any father's love, and always felt that her father just made money." (Participant 20)

Sub-theme 3: Grand-parenting

The number of left-behind children in China is huge, and grand-parenting (sub-theme) cannot be avoided among the population. There is a greater generation gap between grandparents and adolescents. Grandparents are much older, making it difficult for teenagers to express their true needs and ideas under the pressure from family ties.

"The meals cooked by grandparents are not good, and they never ask what they like to eat. And children are forced to eat." (Participant 19)

"She doesn't like to eat food made by grandpa, because it is not delicious, and then grandpa will be unhappy and blame her. She was uncomfortable under this pressure." (Participant 8)

Some grandparents interfere too much with teenagers. As a result, teenagers reduce their activities to prevent interference by their grandparents.

"Once they made a friend, but the friend's father and mother are divorced. Then, grandma went to her school and asked her not to play with that classmate." (Participant 19)

A few parents and grandparents also have different ways of educating their children, which may cause the child not to know who he/she should listen to.

"My education mode is very different from that of her grandmother, which may create a dilemma for her." (Participant 11)

Theme 2: Family function

Sub-theme 1: Family cohesion

Family cohesion (Sub-theme) is the core of family function, evaluates the intimacy between family members. Many participants pointed out that there is little in-depth communication among family members, especially with their children. This results from that they have nothing in common with their children or their parents are not good at expressing themselves.

"I am not so close to him. After he went to high school, we had no topic, and slowly we did not communicate with each other anymore." (Participant 3)

"I really can't and don't know how to communicate with her. I really can't say what she wants, and I don't know how to say it." (Participant 16)

Other participants mentioned that they are usually busy with work, and children spend a lot of time at school. They just have little time to talk to each other.

"We are busy with our own business, if I come back, I will urge her to read books and do her homework. We have very little communication, and I won't take the initiative to talk to her." (Participant 4)

"Her father has been working outside, rarely coming back. He doesn't speak very much, rarely communicates with children, and don't know what to say." (Participant 18)

Further, parents do not take the initiative to communicate with their children, and neither do children. Therefore, in-depth communication between teenagers and their parents is seldom.

"When she wasn't in the hospital, she didn't want to talk to us at all. At home, no matter what she did, she has almost nothing to talk to us." (Participant 10)

Sub-theme 2: Marital status

Most participants mentioned marital status not only seriously affects the family function but also affects the teenagers' sense of family belonging.

"She's been in a bad mood since her dad told her he was going to divorce me. She cared about it and she probably still doesn't have a sense of security." (Participant 6)

Some participants reported that teenagers had negative emotions from that time when they conflict or divorce with their spouse.

"My divorce with her mother definitely has an impact on her. However, I feel that regular quarrels have a greater impact on her. It was during that time that she had emotional problems." (Participant 11)

Sub-theme 3: Sibling relationship

Most participants mentioned that after having a second child, the first child always think parents put more energy on their younger siblings and care less about them. Moreover, they even do not want to have siblings.

“She believes that, as her father, I pay more attention to her brother. Maybe when she quarrels with her brother, we might accuse her instead of her brother.” (Participant 20)

“In her mind, she feels that we care more about her brother, she often said.” (Participant 15)

“I don't know if she is getting not enough attention or other reasons. She doesn't want us to have a second child.” (Participant 4)

In addition, the sibling relationship is not good in adolescents. They often quarrel or even fight with their siblings.

“She has a very bad relationship with her little brother and will fight and grab things with him. Whenever her little brother wants to enter her room, she does not allow. She said that she was annoyed when she saw her little brother.” (Participant 15)

Because of “son preference”, a few girls felt abandoned by their parents when they knew that their mother was pregnant.

“They felt that Mom and Dad didn't want them after having a little brother! They were actually very sad from that time.” (Participant 19)

Sub-theme 4: Psychological neglect

Most parents believe that meeting children's needs for materials and taking care of them in daily life show concern for children. However, they neglect some psychological needs.

“I can only arrange all things for her in daily life but nothing else.”(participant 16)

Furthermore, some parents' attitude towards children is very perfunctory. They have little patience with their children. When the questions parents cannot solve, they will ask children to seek from the internet.

“I don't know the questions she asked, so I said you can check your own mobile phone! In addition, there is no similar hobby between us. I am not very patient to her and do not want to hear her. She asked some words, like what does this mean? I said that I do not know, and you use Baidu to search.” (Participant 4)

Theme 3: Peer interaction

Sub-theme 1: Teasing

Most participants heard from their children who teased by students like weight-teasing, appearance teasing, etc.

“After a boy said that she was fat, she had self-injury at that time.” (Participant 15)

“People laugh at her, saying that her dandruff is like snow. In addition, her favorite teacher also said that she did not pay attention to her personal image and dandruff in front of the class.” (Participant 4)

In addition, due to transferring to another school, teenagers were easily be laughed at. A transfer student usually deemed as an outsider, who will be attracted attention and maliciously speculated.

“After she transferred to another school, she was very lonely and had few friends, and classmates rejected her, saying that the previous school did not want her.” (Participant 20)

“In the new school, he said that he did not make good friends, and some classmates laughed at him. He was a little out of tune with the new environment.” (Participant 14)

Sub-theme 2: Peer harass

Most participants have conscious that peer harass is multifaceted and will combat the self-confidence and self-esteem of teenagers, causing negative emotions that are tired of learning and afraid of going to school.

“When she seems to be in elementary school, the male students often put frogs on her desk and scared her.” (Participant 9)

“When the exam was coming, two students deliberately blocked her at the door to prevent her from entering the classroom for an hour. And two girls and a boy threw the book she needed to review for an hour.” (Participant 4)

Furthermore, because teachers cannot stay with them all the time, peer victimization is often inevitable. Most participants didn't pay attention to their children's relationship with classmates at school because they thought peer harass is a normal phenomenon and is a small matter among classmates.

“She said that some classmates often steal her snacks. I think it's a small matter and I don't care.” (Participant 12)

Sub-theme 3: Peer pressure

Most participants mentioned peer stress is the main source of stress among adolescents. Some of them have greater peer pressure, including academic, interpersonal, and material stress. Academic stress is the most serious, resulting from competition with peers.

“In fact, she used to be good. This time, after she went to high school, because she put his energy into study, she still felt that he could not keep up with others in the studies. Then he felt that she was not as smart as he used to be. She had a lot of psychological pressure.” (Participant 2)

“She used to have a good grade and have a strong character. Other students went to school. She did not go to school because of psychological problems. She was very depressed and felt that there was no hope in life.” (Participant 12)

Sub-theme 4: Influenced by other teenagers engaged in NSSI

Some participants said that the best friend of their children is also engaged in NSSI and they affect each other.

“One of her best friends has severe depression. I feel that her emotional outburst may have something to do with her friend.” (Participant 8)

“Many of her thoughts will tell a girl who suffered from depression. I heard from her mother that the girl brought her a lot of negative emotions.” (Participant 17)

They often communicate about the ways of self-injury on the Internet or face-to-face or even make an appointment to commit suicide or self-injury together.

“The next morning, she told me that she and her friend went to the square and wanted to jump.” (Participant 1)

Theme 4: Psycho-behavioral factors

Sub-theme 1: Emotional regulation

Many participants referred that their children don't know how to manage their emotions. Whenever they are in a bad mood, they close themselves up, or just stay alone, instead of communicating with others or asking for help.

“When she is in a bad mood, she likes to stay alone in her room and don't tell us anything.” (Participant 6)

“He just kept it to himself and didn't say anything.” (Participant 14)

Some participants mentioned that their children suppress their emotions because they think they will affect others, considering the feelings of others too much.

“He thinks that if he tells his friends when he is in a bad mood, his friends will also be in a bad mood. He takes too much care for other people's feelings.” (Participant 5)

Sub-theme 2: Introverted personality

Most participants reported that their children were a little introverted and a few adolescents didn't like to make friends.

“I think my child has a more introverted personality...” (Participant 2,8,10,11,13,14,15,16,17)

“They haven't loved to make friends since they were young. No matter how much I want them to make friends, they don't do it.” (Participant 19)

Furthermore, they often don't want to cause trouble to others and themselves. Hence, even if they are treated aggrieved or unfairly outside, they will be backlogged and will not conflict with others.

“She was bullied at school. I said I was going to find the classmate who bullied her. She refused. She said she was afraid of causing trouble in the future.” (Participant 2)

Sub-theme 3: Mobile phone addiction

Most participants regard mobile phone addiction is a serious phenomenon in adolescents. With a mobile phone, teenagers are reluctant to get in touch with the outside and get more information from their phone.

“He does not want to go to school, and very silent. He just plays with his phone every day. Later, he began to sleep during the day and play at night”. (Participant 14)

For another thing, some negative information can also be obtained from the mobile phones, such as the way of self-injury.

“He likes to sit alone in the room and play with his mobile phone. He also searched online for suicide methods, and I didn't know until came here.” (Participant 3)

5. Discussion

To our knowledge, this is the first study to explore the growing environment of adolescents engaged in NSSI from the parents' perspective in China. The theme analysis shows that parenting style, family function, peer interaction, psycho-behavioral factors contribute to the growth environment of NSSI adolescents.

In the study, it was found that the mother is usually the main person to raise and educate the child, while the father mainly plays the role of co-parenting. As for left-behind children, grandparents play a major role in raising and educating. It may be associated with the culture. In China, most females are family-oriented and males are career-oriented, so females are assigned to raise children. Moreover, an authoritarian parenting style will cause adolescents to have reverse psychology, and a consultative or friend-like approach will make them more willing to communicate with their parents. This is consistent with Assor's study^[19]. Father's active co-parenting promotes the formation and development of parent-child attachment and it is conducive to the development of children's social-emotional ability^[20]. In addition, in most Chinese families, grandparents also play an important role in raising children. Under the influence of the times background, there are great differences between the concepts of grandparents and teenagers, which may lead to some contradictions and teenagers' lack of support. In the perspective, parenting style influences teenagers' psychological and social functioning.

Poor family function generates or aggravates NSSI behaviors. This is in accordance with previous studies^[21]. Less in-depth communication was the most serious issue among participants and their children. The reasons are that parents are busy at work, do not pay enough attention to their children, or just lack of capability of communication. Similar to our findings, other studies have shown that poor communication within the family is a characteristic that leads to the NSSI behavior of individuals and is positively related to the frequency and severity of NSSI^[22, 23]. Besides, the marital status of parents also has a certain effect on teenagers' NSSI behavior, which has been confirmed that experiencing parents' divorce^[24] and witnessing parents' violence^[25] are both related to NSSI. Meanwhile, previous studies have put forward that inter-parental violence reduces an individual's ability to cope with distress both behaviorally and physically^[26, 27]. Our findings also showed that many adolescents with siblings have a bad relationship with their siblings and feel that parents ignore their feelings and pay more attention to their siblings. From this perspective, NSSI, beyond being a way of emotional release, may also be an external manifestation of internal emotional injuries, attracting parents' attention and increasing parents' concern for them.

Interpersonal factors have a significant impact on adolescents with NSSI for increasing or decreasing NSSI behaviors^[28]. In terms of peer interaction, the results showed that 14 adolescents have experienced peer victimization, 4 participants did not report it, and 2 participants did not know. After the experience of school violence, most teenagers had negative emotions, as noted by Cosma^[29]. Furthermore, previous studies have found that there is a consistent and positive link between NSSI and peer victimization^[30]. Most notably, we found that parents and teachers consider teasing and peer harass to be small conflicts among classmates at school. This may be another hidden factor in the effect of peer victimization on teenagers' NSSI behavior. Moreover, teenagers can be influenced by others who engaged in NSSI. This is consistent with previous studies^[31, 32]. They get the idea of participating in NSSI from their peers^[33] and talk about NSSI, sharing methods, encourage each other and/or participate in NSSI together^[34, 35].

Furthermore, parents reported that most teenagers like to be alone to deal with their bad emotions. They cannot manage and release their emotions well. There is no doubt that emotional regulation is considered as the most common motivation of NSSI^[36]. Emotional dysregulation is more likely in adolescents engaged in NSSI^[37]. Additionally, introverted personality and mobile phone addiction are the risk factors for NSSI, separating teenagers from society and reducing communication with others. There is an agreement that the greater mobile phone usage is, the poorer psychological health will be^[38].

In a word, these themes can not only act alone but also influence each other. Theme 1 and theme 2 are both family factors. Theme 3 is in regard to peer relationships. These are external factors. Theme 4 is an internal factor (See Fig. 2).

5.1 Limitation

Firstly, this study may be more representative of female NSSI adolescents because 85% of teenagers are females. Although previous studies have reported that females have a higher rate of NSSI than males^[3], future research can have a more balanced male to female ratio. Secondly, the study focus on the inpatient NSSI teenagers. Most of the participants come from cities and have a high level of education (High school or above high school). In future research, parents of NSSI adolescents who have low education levels in rural areas need more attention. Finally, a weakness of the study is that retrospective assessment may reduce accuracy.

5.2 Conclusion

The qualitative study provided four key points of the growing environment in Chinese adolescents with NSSI. Based on the points, school and family are the critical place where intervention is needed. Moreover, future research can explore the mediating variables of the relationship between various factors and NSSI behavior of adolescents and make a better quantitative analysis of how these factors affect NSSI.

Declarations

Author Contributions: Data curation, Xi Fu, Jiaxin Yang, Jingjing Lin, and Yao Peng; Formal analysis, Xi Fu and Jiaxin Yang; Writing – original draft, Xi Fu; Writing – review & editing, Xiaoli Liao, Yidong Shen, Jianjun Ou and Yamin Li. All authors contributed to the writing of the manuscript and agreed on the submission of this paper.

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Figures

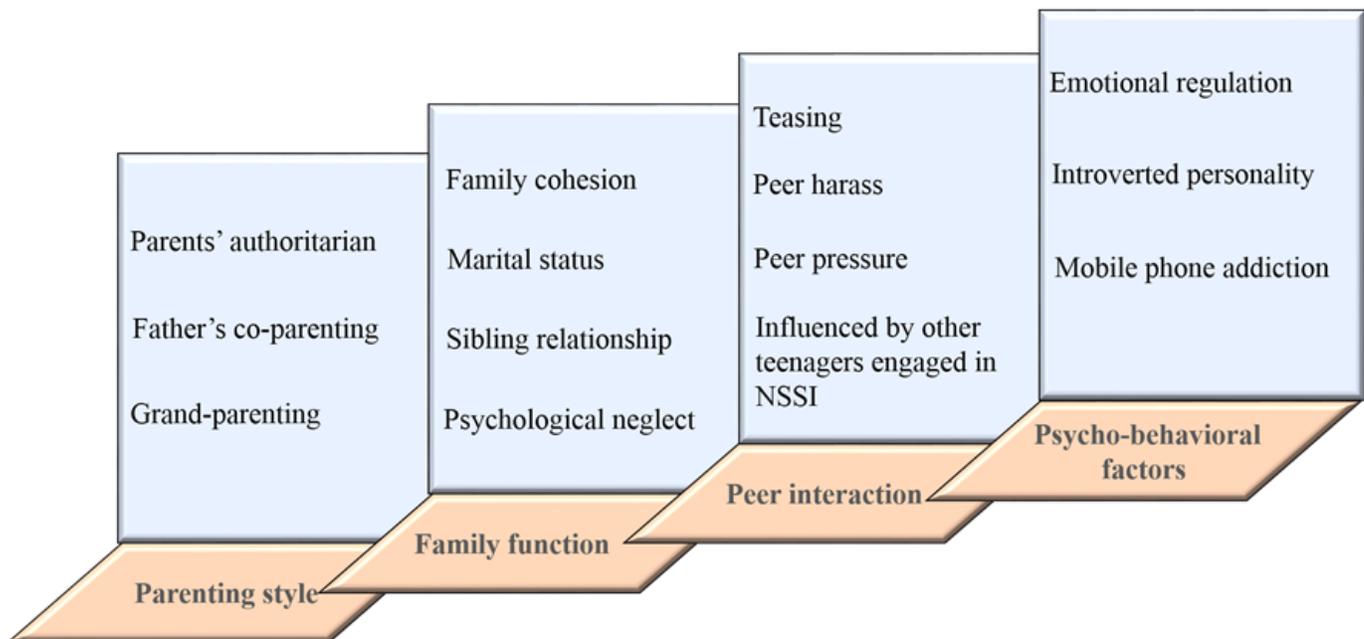


Figure 2

Thematic list of the 4 themes (in pink) and 14 Sub-themes (in blue)

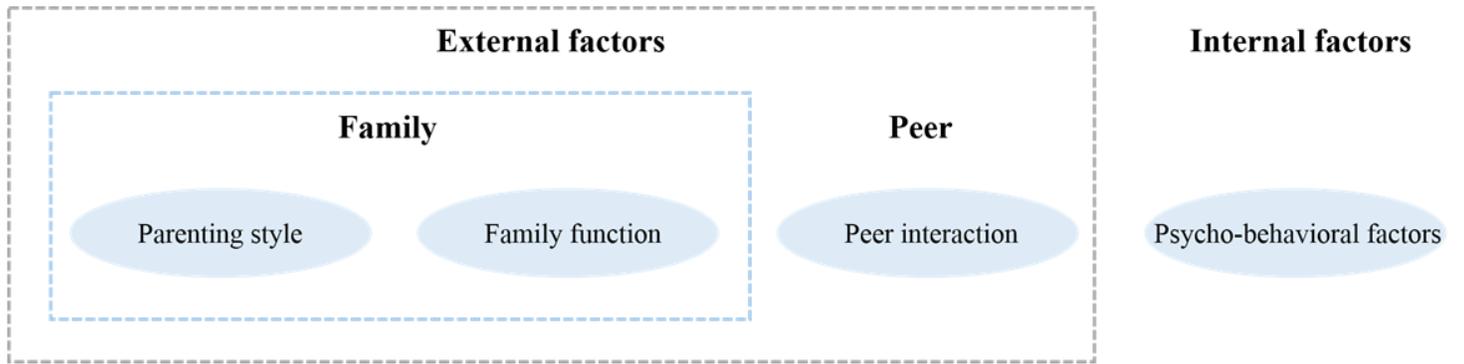


Figure 4

The relationship between themes