

Using Q Methodology to Explore the Behaviors of Close Relationships That Trigger Negative Emotions in Teenagers

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Abstract: The present study explores causal factors behind negative emotions in teenagers, and the relationship between teenagers' negative emotions and the behaviors of their close relationships, including parents, teachers, and peers. Q methodology was chosen for this research. 48 teenagers were recruited to do a Q sort experiment containing 48 statements. Software KADE V1.2.1 was adopted, and PCA and maximum variance rotation was applied in the data analysis. Four significant and dominant viewpoints of triggering teenagers' negative emotions were found in this study: a. parents' inappropriate behaviors have the strongest negative impact on teenagers' emotions; b. teenagers' lack of respect from close relationships; c. the discordance between close relationship behavior and teenagers' strong sense of self-esteem cause much negative emotion in teenagers; d. teenagers' general aversion to disciplinary and punitive measures enforced by their parents and teachers to regulate teenagers' behavior, which in turn heightened the frequency of teenagers' experiencing negative emotions. Another major observation was that different close relationships have different impacts on teenagers' negative emotions, and the behaviors that trigger negative emotions in teenagers distinguishing with different characteristic among the three close relationships.

1 INTRODUCTION

Negative emotions result from individuals' subjective perception of unpleasant emotional experience, and such emotions often include anger, disgust, fear, nervousness, anxiety, depression, and so on (Watson, 1998). According to China National Mental Health Development Report (2019-2020), in 2020, 24.6% of the adolescent population suffered from depression—17.2% with mild depression and 7.4% with severe depression; out of this population, about 10% in primary school, 30% in junior high school, and nearly 40% in senior high school suffered from depression. The report revealed that rate of depression has been significantly higher in children from elementary to middle schools. Junior high school is a period when children transition childhood to teenage. This period of transition brings about marked changes in teenagers, both physiological and psychological changes, and they face new, more challenging changes and requirements to be met with in the

learning environment and need to develop new emotional skills to achieve autonomy (Dominique, 2014; Liu, 2019). Without doubt, these changes exert a certain degree of pressure to teenagers, and cause emotional distress and induce various mental health issues, such as anxiety, depression and low self-esteem (Dominique, 2014). Therefore, the present study focuses on negative emotions in teenagers and presents its findings on what are some of the predisposing factors of that trigger negative emotions in teenagers.

Researchers have been paying increasing attention to negative emotions in teenagers. Past studies have shown that negative emotions cause various adverse effects on the developmental trajectory of teenagers, including negatively affecting their physical and mental health and well-being and academic and social skills. In terms of cognitive activities, negative emotions interfere with normal cognitive activities (Guo, 2005), impede cognitive processing (Lin, 2016), hinder the implementation of individual response inhibition (Ding, 2019), and

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reduce the engagement of activities (He, 2021). In terms of behavior, negative emotions have a negative impact on mental health and impedes the development of a healthy personality in teenagers (Dominique, 2014); as for explicit behaviors, negative emotions push teens towards negative coping and drive them to pick up unhealthy habits, such as smoking, dropping out of school, aggression, and even self-injury and suicide (He, 2021; Chen, 2011). Negative emotions have an enormous impact on the physical and mental health and well-being and development of teenager; given that all these negative traits may lead to severe complications and impede the process of teens developing a healthy personality, we believe negative emotions in teenagers is a significant concern for the society at large and worthy of in-depth exploration and analysis in order to find ways and means to curtail and eradicate mental health issues at an early stage.

Both interpersonal relationship and social interaction have a major influence on an individual's emotions. Junior high school students experience emotional turmoil (Zeng, 2013), and their ability to cope with their emotions is much weaker compared to adults, making them more vulnerable to negative stimuli in their familial and social environment. Furthermore, the quality of interpersonal relationship is a significant factor affecting negative emotions in teenagers (Dang, 2016). The interpersonal network of teenagers is relatively simple, as their daily interpersonal activities revolve around home and school. According to Ecological System Theory, family and school microsystems have prominent effects on teenagers' physical and mental development (Xu, 2017). Parents, teachers, and peers are a part of the said two microsystems and how they behave or deal with teenagers have a major influence on the development of teenagers. Previous studies have found that the quality of parent-child relationship can effectively predict negative emotions such as depression and anxiety in teenagers in their family environment (Tian, 2014). In addition, parenting style (e.g., showing warmth and understanding; using punitive measures to discipline children, and being excessively protective) is significantly associated with teenagers' negative emotions (Yang, 2010). In the school environment, teenagers' relationship with teachers and peers are important factors causing negative emotions in teenagers (Liu, 2020). During adolescence, a strong, healthy teacher-student relationship and peer relationship can help teenagers to gain recognition and acceptance among peers, reduce confusion and anxiety, improve self-efficacy and learning

motivation, and boost mental health. In the absence of such healthy relationships in the school environment, children frequently experience negative emotions such as a sense of inferiority, loneliness, anxiety, and depression (Lian, 2016; Wang, 2018).

In addition to interpersonal relationship, the personal factors of teenagers also have a significant amount of influence on their emotions. Studies have shown that lack of self-esteem is a key cause behind children experiencing negative emotions and that it impedes children from developing a healthy personality and social skills (Lian, 2016; Orth, 2016). Teenagers develop their perceptions with age, and they gradually begin to emphasize their self-esteem. Therefore, social support from parents, teachers, and peers, such as respect, recognition, and trust, become even more important to teenagers (Dang, 2016). Therefore, when the need of self-esteem is not satisfied, it leads to teenagers experiencing negative emotions (He, 2021).

Although various causal factors behind teenagers' negative emotions have been studied in the past, they have not been further classified and specified to help study in depth the causes for negative emotions in teenagers in various settings; for example, what type of interpersonal relationship plays the most important role in inducing negative emotions in teenagers, which type of behavior is more likely to induce negative emotions in teenagers, and whether there is a relationship between the creation of negative emotions and behavior of close relationship in teenagers' lives. Second, in terms of interpersonal relationships, previous studies have mostly focused on the impact of one or two close relationships on teenagers' negative emotions; only a few research endeavors have conducted multidimensional studies focusing on different interpersonal relationships. Third, negative emotions are an individual's subjective experience. Stephenson believes that individual's subjective feelings, opinions, ideas, attitudes, and so on can be systematically and scientifically studied (Zhou, 2006). However, since previous studies were basically conducted through questionnaires, scales, and so on, some valuable subjective opinions and specific individual factors were either not identified or were not given significant attention even if they were identified. Therefore, we considered using new methods and perspectives to explore negative emotions in teenagers. We chose the Q methodology to conduct a multidimensional study on the behaviors of close relationship that trigger negative emotion in teenagers.

2 METHOD

2.1 Q Methodology

Q methodology was developed in 1935 by William Stephenson, a British scholar of physics and psychology, in order to systematically address the elusive subjectivity (Watts, 2012). The Q methodology is named so because it is a research method involving the Queue (Zhou, 2006). It uses both qualitative and quantitative methods to systematically and stably depicting the subjectivity to arrive at an accurate understanding of the real perspectives of participants, thus reducing potential researcher bias using a person-centered approach (Zhou, 2006). It is highly effective for identifying and analyzing people's subjective views and attitudes towards a certain research topic (Joy, 2011). It analyzes participants' perspectives by asking them to rank-order a set of subjective statements on specific topics and identified patterns in the participants' responses (Jiang, 2013). Q methodology has been gradually developed, and it has now gained wide recognition and acceptance among researchers in many fields such as psychology, education, nursing, marketing, and public policy.

2.2 Concourse and Q Set

Concourse is a collection of various subjective descriptions or statements held by people on a certain topic, such as opinions, attitudes, values, opinions and beliefs. It can also be nonverbal expressions, such as pictures, music, smells, and objects (Watts, 2012). Q Set, is a group of representative subjective statements selected from the collection (Zhao, 2003). Based on the integration of multiple relationships, we did concourse through questionnaire, interview, and literature review, to collect views and opinions from three groups—students, teachers, and parents. Finally, 48 representative statements (see Appendix) were taken up as Q Set for further analysis. A

previous study has confirmed that Q Set constructed from the same collection did not have an impact on the results of a research using Q methodology (Thomas, 1992), so we were convinced that the Q Set of this study was reliable. The statements were numbered and made into cards, then divided into seven types of behavioral characteristics: i. recognition and acceptance; ii. respect and self-esteem; iii. warmth and understanding; iv. excessive involvement and protection; v. others' habits and characters; vi. severe discipline and punishment; and vii. equality and fairness.

2.3 Participant/P Set

In general, Q methodology is useful for studies using a small sample, the appropriate size of participant population for this method to be effective should be in the range of 40 to 60 participants (Watts, 2012). In this study, 50 junior high school students aged 12-15 years were recruited from Shenzhen–Shantou Special Cooperation Zone of Guangdong Province. A total of 48 students were finally included in the study after excluding invalid data; their average age was 14.27 years; gender-wise, the sample included 27 boys and 21 girls. The study was approved by the Ethics Committee of the Institute of Psychology, Chinese Academy of Sciences, and informed consent was obtained from all participants and their guardians.

2.4 Procedure

Participants were asked to sort the 48 statements onto the Q grid (see figure 1) base on the degree of triggering teenagers' negative emotions according to their understanding and thoughts. Participants checked the sort and write down the card number on a paper with Q grid form when they finish sorting. The researchers checked the numbers and conducted a short interview with participants, especially to understand their interpretations of the statements sorted on both ends.

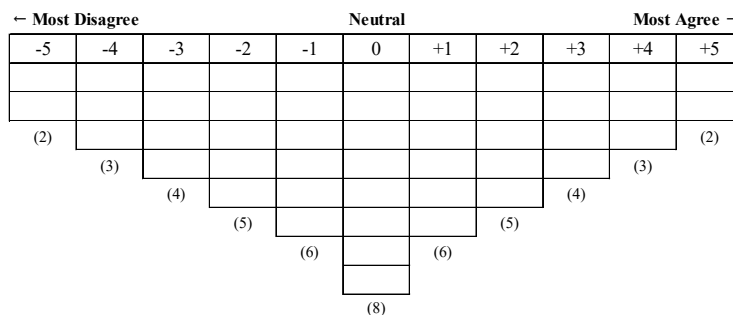


Figure 1: Q grid.

2.5 Analysis

The classified Q-Sort data were analyzed using KADE V1.2.1 software. By-person factor analysis was used to calculate the similarity between Q-Sorts of participants. Principal component analysis and maximum variance rotation were applied, eigenvalues greater than 1.00 were taken into account, and a scree plot was used to determine the number of factors extracted and retained. The software figured out the weight and Z scores of each statement in every Q-Sort. Z scores for each individual Q statement were converted into a single-factor array, which is a single Q-Sort configured to represent the viewpoint of a particular factor. The factor array decided the average ranking of each statement in the Q-Sort that is significantly related to a particular factor, in order to arrive at the composite Q-Sort results.

3 RESULTS

Four factors were extracted: factor 1 (F1), factor 2 (F2), factor 3 (F3), and factor 4 (F4). These factors respectively explained 12%, 8%, 10%, and 11% of the total variation, and the cumulative percentage, 41%, explained the variance (see Table 1). In the Q methodology, factors' cumulative variation was in the range of 35%-40%; thus, above variations can be considered acceptable in the context of the present study (Watts, 2012). On the basis of these observations, we conclude that the present study's results are considerably significant. In addition, the correlation of factors is between 0.22 and 0.35 (see Table 1), indicating that the factors are relatively independent. Table 2 presents the Z scores and factor ranks (Q-Sort value) for each statement. The composite Q-Sort of each factor (see Figures 2, 3, 4, 5) represent the patterns of participants which were significantly associated with a specific factor.

Table 1: Eigenvalues and Correlation between Factors.

| Factors | F 1 | F 2 | F 3 | F 4 |
|----------------------------|------|------|------|------|
| Eigenvalues | 9.14 | 3.92 | 3.31 | 2.98 |
| Explained variance (%) | 12 | 8 | 10 | 11 |
| Cumulative (%) | 12 | 20 | 30 | 41 |
| Participants comprised (%) | 23 | 8 | 17 | 10 |
| F 1 | 1.00 | 0.27 | 0.26 | 0.22 |
| F 2 | 0.27 | 1.00 | 0.32 | 0.27 |
| F 3 | 0.26 | 0.32 | 1.00 | 0.35 |
| F 4 | 0.22 | 0.27 | 0.35 | 1.00 |

Table 2: Z Scores and Q-Sort Value (Factor Ranks) of Statements in Factors.

| Statements No. | Factor 1 | | Factor 2 | | Factor 3 | | Factor 4 | |
|----------------|----------|--------------|----------|--------------|----------|--------------|----------|--------------|
| | Z Score | Q-sort Value | Z Score | Q-sort Value | Z Score | Q-sort Value | Z Score | Q-sort Value |
| 1 | 1.80 | 4 | 0.46 | 1 | -0.80 | -2 | -0.55 | -1 |
| 2 | 1.15 | 3 | -0.91 | -3 | -1.38 | -4 | -0.53 | -1 |
| 3 | -0.12 | 0 | -0.26 | 0 | 0.68 | 2 | -0.09 | 0 |
| 4 | 0.06 | 0 | -0.87 | -3 | -1.03 | -3 | 0.42 | 0 |
| 5 | 0.78 | 2 | -0.27 | -1 | -1.09 | -3 | -0.42 | -1 |
| 6 | 1.86 | 5 | 0.29 | 1 | 1.61 | 4 | 1.35 | 4 |
| 7 | 1.06 | 3 | 1.50 | 3 | 0.03 | 0 | -1.08 | -3 |
| 8 | 1.16 | 3 | 0.49 | 2 | -0.23 | 0 | 0.15 | 0 |
| 9 | 0.49 | 2 | 1.31 | 3 | -1.72 | -5 | -0.83 | -2 |
| 10 | 1.59 | 4 | -1.28 | -4 | 0.28 | 1 | -0.35 | -1 |

| | | | | | | | | |
|----|-------|----|-------|----|-------|----|-------|----|
| 11 | 0.18 | 1 | 0.48 | 2 | -0.67 | -2 | -1.03 | -3 |
| 12 | 0.77 | 2 | 2.66 | 5 | 1.37 | 3 | 1.67 | 5 |
| 13 | 0.29 | 1 | 0.44 | 1 | -0.83 | -2 | -0.68 | -2 |
| 14 | 1.00 | 2 | 1.88 | 5 | 2.20 | 5 | 1.96 | 5 |
| 15 | 1.64 | 4 | 1.53 | 4 | 1.16 | 3 | 1.02 | 3 |
| 16 | 0.12 | 0 | -0.09 | 0 | -1.34 | -4 | -0.57 | -1 |
| 17 | 1.02 | 3 | -0.19 | 0 | -0.62 | -2 | -0.83 | -2 |
| 18 | -0.57 | -2 | -1.14 | -4 | -1.42 | -4 | -2.64 | -5 |
| 19 | 0.14 | 0 | -1.01 | -3 | -0.09 | 0 | -0.67 | -1 |
| 20 | 0.07 | 0 | 0.00 | 0 | -1.31 | -3 | 0.50 | 1 |
| 21 | -0.35 | -1 | -0.87 | -2 | -0.24 | 0 | 0.64 | 1 |
| 22 | -0.83 | -2 | -0.41 | -1 | -0.96 | -3 | 0.63 | 1 |
| 23 | -1.34 | -4 | 0.07 | 1 | -0.46 | -1 | 0.44 | 1 |
| 24 | 0.23 | 1 | -1.34 | -4 | -0.89 | -2 | 0.53 | 1 |
| 25 | -1.86 | -4 | -0.13 | 0 | -1.83 | -5 | 1.39 | 4 |
| 26 | -0.20 | -1 | -0.04 | 0 | -0.37 | -1 | 0.87 | 2 |
| 27 | -0.79 | -2 | -0.28 | -1 | 0.36 | 1 | 1.44 | 4 |
| 28 | -0.45 | -1 | 0.00 | 0 | 0.38 | 1 | 0.94 | 3 |
| 29 | -0.31 | -1 | -1.91 | -5 | -0.28 | 0 | 0.49 | 1 |
| 30 | -0.90 | -3 | 0.86 | 3 | -0.56 | -1 | 0.90 | 3 |
| 31 | -0.14 | 0 | -1.05 | -3 | 1.57 | 4 | 0.73 | 2 |
| 32 | -1.96 | -5 | -0.82 | -2 | 0.25 | 1 | -0.77 | -2 |
| 33 | -0.91 | -3 | 0.58 | 2 | -0.54 | -1 | 0.01 | 0 |
| 34 | 0.25 | 1 | -0.74 | -2 | -0.16 | 0 | 0.64 | 2 |
| 35 | 1.83 | 5 | 0.26 | 1 | 1.74 | 5 | 1.33 | 3 |
| 36 | -1.53 | -4 | -2.20 | -5 | -0.29 | -1 | -1.71 | -4 |
| 37 | 0.23 | 1 | -0.36 | -1 | 1.55 | 4 | -1.09 | -4 |
| 38 | -0.42 | -1 | 1.01 | 3 | 0.69 | 2 | -0.08 | 0 |
| 39 | -0.14 | 0 | -0.50 | -2 | 0.83 | 2 | -1.03 | -3 |
| 40 | -0.01 | 0 | 1.59 | 4 | 1.25 | 3 | 0.81 | 2 |
| 41 | -0.72 | -2 | -0.41 | -1 | -0.03 | 0 | -0.78 | -2 |
| 42 | -1.23 | -3 | 0.03 | 1 | 0.10 | 1 | -1.00 | -3 |
| 43 | -0.71 | -2 | 0.60 | 2 | 0.83 | 2 | 0.17 | 0 |
| 44 | 0.16 | 1 | 0.72 | 2 | 1.20 | 3 | 0.11 | 0 |
| 45 | -0.38 | -1 | 1.69 | 4 | 0.59 | 1 | -1.35 | -4 |
| 46 | 0.99 | 2 | -0.75 | -2 | 1.06 | 2 | 0.73 | 2 |
| 47 | -2.04 | -5 | -0.48 | -1 | -0.20 | 0 | -1.80 | -5 |
| 48 | -0.96 | -3 | -0.15 | 0 | -0.36 | -1 | 0.00 | 0 |

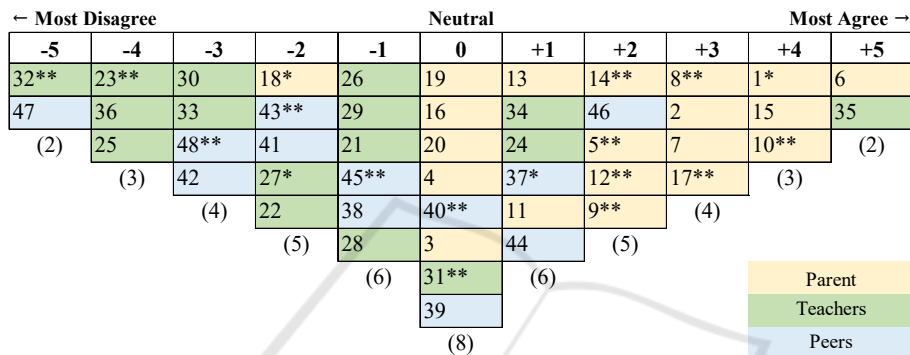
3.1 Factor 1

The eigenvalue of F1 is 9.14, explained variance is 12%, and 23% of the 48 participants is comprised. F1 shows an obvious effect of centralizing trend. Statements in the positive score column are mostly related to parents, whereas the statements in the

negative score column are basically related to teachers and peers, indicating that the participants care more about the parent-child relationship and believe that it is the most important type of relationship among close relationships. The ranking also shows participants indicated the *most agree* response for S6(+5) (S for Statement) and S35(+5)

statements; statements in -4 column are S1, S15, and S10. Participants indicated the *most disagree* response for S32(-5) and S47(-5) statements, a trend which was also observed in regards to statements S23(-4), S36(-4), and S25(-4). The ranking also shows that in terms of abusive behavior, parental abuse (S1: +5) is more likely to cause negative emotions than abuse by peers (S37: +1). In terms of punishment behavior, parents' punishment (S14: +2) is more likely to stimulate negative emotions than teachers' punishment (S23: -4). In terms of acceptance, parents comparing their children to others (S1: +4) is more likely to trigger negative

emotions than teachers do (S22: -2). In terms of warmth and understanding, parents' comments about unsatisfactory grades (S2: +3) is more likely to cause negative emotions than teachers' comments (S21: -2) and peers' showing off their good scores to provoke one another (S42: -3). To sum up, the patterns related to F1 show that participants are most concerned about their parents' comments and behavior towards them and strongly agree that their parents' behavior and attitude have the greatest power and influence to trigger negative emotions in them and in a variety of ways.



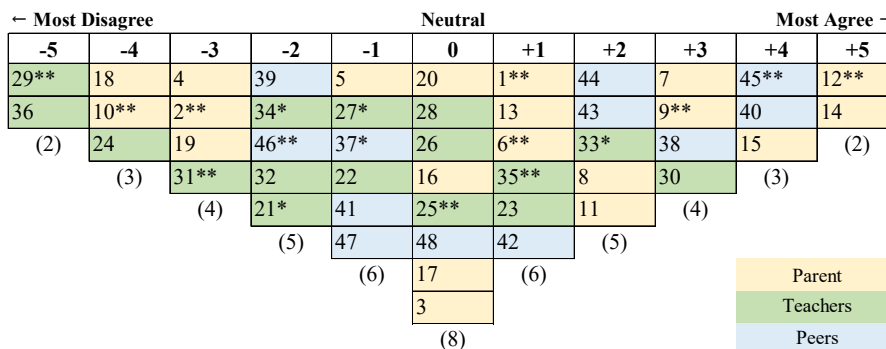
* Distinguishing statement at P<0.05; ** Distinguishing statement at P<0.01.

Figure 2. Composite Q Sort of Factor 1.

3.2 Factor 2

The eigenvalue of F2 is 3.92, explained variance is 8%, and 8% of the 48 participants is comprised. Columns +5 and +4 of F2 show participants *highly agree* with statements about respect: S12 (+5) and S40 (+4), and distinguishing statements (P<0.01) S12 (+5), S45 (+4), S9 (+3), S1 (+1), S6 (+1), and S35 (+1), all show that teenagers desire respect from

others. Participants showed they completely disagreed with statements in regards to recognition—S29(-5), S36(-5), S18(-4), S10(-4), and S24 (-4). Although the centralizing effect of F2 is not obvious, statements of +5 and +4 columns reflect parent-child relationship and peer relationship, and as a whole, positive columns mostly reflect parents and peers. F2 indicates that parent-child relationship and peer relationship are more prominent in this pattern.



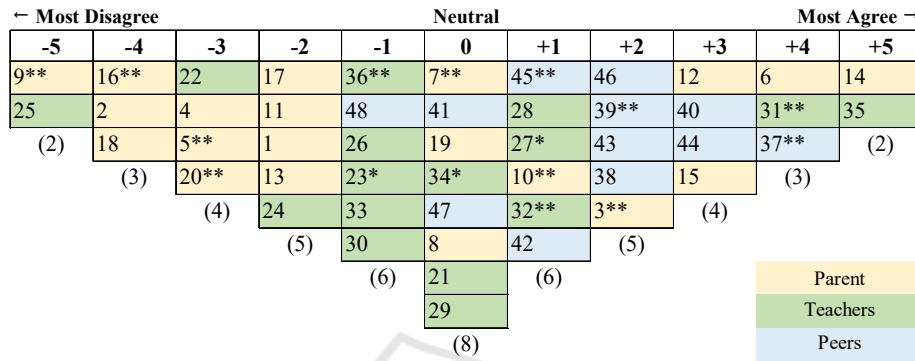
* Distinguishing statement at P<0.05; ** Distinguishing statement at P<0.01.

Figure 3: Composite Q Sort of Factor 2.

3.3 Factor 3

The eigenvalue of F3 is 3.31, explained variance is 10%, 17% of the 48 participants is comprised. Participants indicated the *most agree* response for statements S14 (+5) and S35 (+5), followed by S6 (+4), S37(+4), and S31 (+4) as well. These five statements concerning parents, teachers, and peers indicate the importance of the three relationships in

this pattern of perceptions. Participants responded with *most disagree* for statements S9(-5) and S25(-5), followed by S16 (-4), S2 (-4), and S18 (-4). In addition, although the statements indicated in the high-score column are related to parents and teachers, and statements about peers are concentrated on the positive column. F3 indicates that the three close relationships are important in this pattern of participants' perceptions.



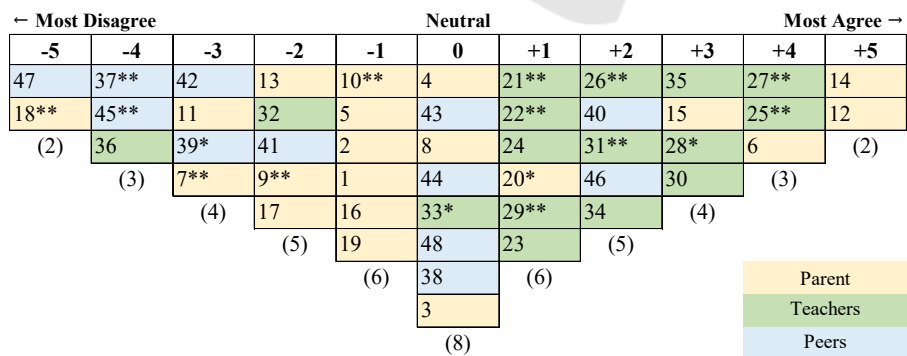
* Distinguishing statement at P<0.05; ** Distinguishing statement at P<0.01.

Figure 4: Composite Q Sort of Factor 3.

3.4 Factor 4

The eigenvalue of F4 is 2.98, explained variance is 11%, and 10% of the 48 participants is comprised. There are more statements about severe discipline and punishment which are ranked in positive columns, such as S14 (+5), S27 (+4), S35 (+3), S35 (+2), S30 (+1), and S23 (+1). Statements of negative columns are likely related to respect and self-esteem, others' habits and characters, and so on, such as S47 (-5), S18(-5), S37(-4), and S45(-4). In addition, the

distinguishing statements S27 and S25 at 0.01 level of significance are obviously related to teacher's strict discipline; this trend was also observed with statements S26 (+2), S31 (+2), S21 (+1), S22 (+1), and S29 (+1). Taken together, the viewpoint patterns of F4 reveal that criticism and punishment play a major role in causing negative emotions in teenagers. In addition, statements in the positive column are mainly related to parents and teachers, indicating that both parent-child and teacher-student relationships are more important in this pattern of viewpoints.



* Distinguishing statement at P<0.05; ** Distinguishing statement at P<0.01.

Figure 5: Composite Q Sort of Factor 4.

4 INTERPRETATION

The viewpoint patterns observed for each factor are interpreted as follows, combining the composite Q-Sort results and interview information.

4.1 Pattern 1: The Way My Parents Treat Me Greatly Affects My Emotions

F1 shows that parent–child relationship exerts the greatest influence and acts as the strongest trigger and causal factor behind teenagers’ developing negative emotions; the main reason for this trend is that teenagers care the most and are most sensitive about parent’s behavior towards them, especially in relation to the following traits: i. respect and self-esteem; ii. recognition and acceptance; and iii. warmth and understanding. Parental abuse occurs in many forms; for example, parents abuse them or scold them for mistakes and failures (+5); deny them incentives meant for encouraging them to do well in studies or in any other area (+4 and +3); talk about their shortcomings or making embarrassing remarks about them in front of others (+3); do things for children that the children often dislike, in the name of being good to them (+3); infringe on children’s privacy (+2); and so on. All of these traits easily cause negative emotions, such as feeling inferior and low in self-esteem, anger, sadness, and depression. Some participants mentioned in the interview: “Our parent is supposed to be the most trustworthy for us. If even our parent treats us like that, what does it mean?” and “We have very strong suppressed emotions in our heart, and we need to vent them out.” Based on the composite Q-Sort results and interviews, we found that when parents do not meet the expectations of their teenage children, conflicts often occur between them and the children, and any inappropriate way that the parent uses in order to deal with such conflicts is a major cause for teenagers developing negative emotions.

4.2 Pattern 2: Expecting Others’ Respect

Participants in this pattern show that parents do not respect their privacy (+5) and talk about their shortcomings and embarrassing them in front of others (+4) are the most likely to trigger negative emotions, followed by peers infringing on their privacy; saying something bad about them (+4); calling them out with a nickname to heckle them,

ridiculing them in various ways, and so on (+3). However, teachers disrespecting them is generally ranked near the neutral column. Some of the participants explained in the interview: “Parents are the most important to teenagers, the closest people hurt the most”; “Peers know about their peers better, so we expect our peers to respect each other”; “We should respect teachers first, and teachers have prestige”. Thus, since children view their teachers as having the highest authority in the school setting because they teach them and correct their wrongdoings, the teenagers expect less respect from teachers than they would from their parents and peers. However, it is worth mentioning that when teachers do not respect their family, it causes great negative emotions. Participants can somehow accept teachers disrespecting them but cannot accept teachers disrespecting their families. It also proves F1—that parents hold the highest place in teenagers’ hearts; thus, both parents’ behavior and attitude and respect from parents are very important to the teenagers.

4.3 Pattern 3: Have Strong Self-Esteem, Reject Violence

According to pattern 3, parents’ acts of punishment, such as hitting and kicking (+5), and teachers’ comments about family members when criticizing students (+5) are the strongest triggers for negative emotions, followed by parental abuse (+4), peer abuse (+4), and teachers disrespecting students’ self-esteem (+4). We found from the participants’ views shared during the interviews that, in general, parent’s resorting to punishment, abuse, temper tantrums; refusing to fulfil or meet with their need; and any form of verbal and nonverbal violence can seriously hurt teenagers’ self-esteem. Teachers often rebuke and ridicule teenagers in the name of correcting them, ignoring the feelings of teenagers. Such ridicule and humiliation severely erode the teenagers’ self-esteem and sense of self-worth. In addition, peers are the people with whom teenagers interact for a long time and on a daily basis. It is important that they understand one another and respect each other’s privacy and be sensitive and careful about what they say about one another’s school performance, family background, and so on; however, some teenagers lacking in emotional maturity either intentionally or unintentionally end up talking about sensitive topics and making insensitive remarks that cause negative emotions in the teenager who has to bear such remarks, and the bad blood created by such remarks often have a lasting negative and eroding impact on the harmony and goodwill between peers.

Participants also indicated that children do not have strong self-esteem, but teenagers, being at the cusp of adulthood, do; they have significantly increased demand for self-esteem; hence, even minor verbal abuse and physical aggression of any kind would easily trigger negative emotions and will have a long-term negative impact on the development of teenagers.

4.4 Pattern 4: Being Averse to Severe Discipline and Punishment

This pattern reveals that severe criticism and punishment from parent and teachers can be strong triggers for teenagers’ experiencing negative emotions. Participants indicated during the interview that they are going through the “rebellious stage” and are particularly averse to parental punishment, especially physical acts of punishment, such as hitting, pinching, and kicking (+5). Although parent's scolding (+4) and tantrums (+3) also cause negative emotions, physical punishment has a much more intense negative effect and is more likely to trigger negative emotions in teenagers. In addition, teachers' academic expectations for students—statements S25 (+4) and S26 (+2), and behavioral expectations—statements S27 (+4), S30 (+3), S31 (+2)—are often promoted through criticism, comparison, punishment, and reporting to parents. Although the

original intention of the teachers is to educate students, it brings great pressure on students to perform better in future and they are often reminded of their failures, which is one of the strongest triggers for negative emotions. This way students become increasingly more averse to any kind of disciplinary measure and develop psychological resistance. Participants emphasized that they are in a confused frame of mind and critically need positive discipline and guidance.

5 DISCUSSION

5.1 Behavioral characteristics of close relationships that induce negative emotions in teenagers

Our findings showed that different types of behaviors from close relationships have different impact to induce negative emotions in teenagers (see Figure 6). Parental behaviors mainly match four types of traits: i. respect and self-esteem; ii. recognition and acceptance; iii. warmth and understanding; and iv. severe discipline and punishment. Teachers’ behaviors mainly match two types of traits: i. respect and self-esteem and iii. severe discipline and punishment. Peer behavior matches only one type of trait: respect and self-esteem.

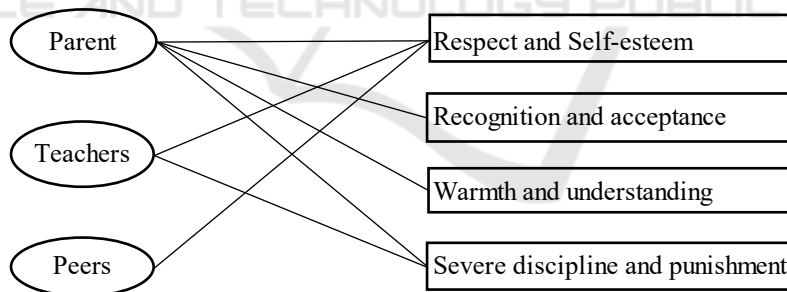


Figure 6: Relationship Between Behavior and Close Relationship on Inducing Teenagers' Negative Emotion.

5.1.1 Characteristics of Parental Behavior That Induce Negative Emotions in Teenagers

Parent–child interaction in daily life plays the most direct and prominent role in inducing negative emotions in teenagers and is mainly related to these four traits: i. respect and self-esteem; ii. recognition and acceptance; iii. warmth and understanding, and iv. severe discipline and punishment. These traits occur possibly because of the influence of the

traditional concepts of Chinese education. Traditionally, Chinese parents are not very demonstrative in communicating their emotions to children; they are often reserved and aloof and tend to avoid showing love and affirmation but are more prone to demonstrate refusal, denial, and restriction in their interaction with their children (Luo, 2013). Such problems do not last longer because teenagers gradually but firmly develop their sense of independence, becoming bolder and assertive over time in forming their own values and worldviews.

Psychologically, they want to be independent—eager to be treated as adults by their parents and unwilling to be disciplined by their parents (Tian, 2014; Zhang, 2009). Therefore, excessive or indiscriminate refusal and denial by parents may reduce teenagers' sense of worth and self-efficacy, making teenagers unable to do better or improve themselves and get their parents' appreciation and encouragement; this reduces parents' warmth and understanding, intensifies parent-child conflicts, and leads to a variety of negative emotions in teenagers. Long-term and routinely occurring nonphysical conflicts at some point may escalate into physical conflicts, such as hitting, kicking, and so on. This is the most intense form of discipline, which not only directly intensifies negative emotions but also leads to behavioral problems. During the interview, participants conveyed that they hoped their parents would reduce negative criticism and punishment, support them with positive encouragement, and provide an independent, respectful, and warm family environment. Thus, any efforts from the parents to improve their communication and using positive encouragement with children will substantially reduce the frequency of negative emotions experienced by adolescents.

5.1.2 Characteristics of Teacher Behavior that Induce Negative Emotions in Teenagers

Respect and self-esteem and severe discipline and punishment in teacher-student relationship plays the most important role in inducing negative emotions in teenagers or vice versa. There may be two main reasons: a. Teachers generally have a serious attitude towards work, so they are required to continuously evaluate students' performance against predetermined standards and academic goals. However, some teachers ignore engaging in emotional communication with their students, which leads to negative emotions in students, such as feeling shame, sense of inferiority, anxiety, and resentment towards studies. Second, teenagers' mental development reflects their mindset to being close that of an adult but not indeed that of an adult; it is in the middle stage between developing maturity and being fully matured; there is thus often confusion in teenagers about how to think, act, and express their emotions in school in an acceptable way. Given this predicament, it is important that they receive encouragement and support from teachers to develop their ability to communicate as a person with full autonomy and gain respect and recognition towards their positive behavior and personality (Zhang,

2009). However, teachers' often slip into demonstrating insensitive and rough attitude and behavior that stimulate psychological inversion leading to a variety of negative emotions in teenagers.

5.1.3 Characteristics of Peer Behavior That Induce Negative Emotions in Teenagers

In peer relationships, respect and self-esteem play a major role in inducing negative emotions in teenagers. Peers are an important source of social needs and social support and play an important protective factor in the process of teenager's psychosocial adaptation (Lian, 2016). During teenage especially, closeness with peers is at its highest (Tian, 2014), which means peers know more about each other's situation than their parents do. However, teenagers being in a state of maturity that is still developing and their personality still evolving, they often either intentionally or unintentionally end up getting involved in discussions on matters of personal privacy, lifestyle habits, academic performance, and image characteristics, in their interaction with peers; such interactions lead to peers insulting or putting down one another and acrimony and bitterness between peers that cause negative emotions.

5.2 The Influence of the Need for Respect and Self-Esteem on Teenagers' Developing Negative Emotions

First of all, teenagers believe that their unfulfilled, and often ridiculed and ignored, need for respect and self-esteem is a major cause for experiencing negative emotions. This is because self-esteem is a core component of the self—the personhood—and one of the basic human needs. Everyone expects to be respected by others and seeks to gain and enhance self-esteem through various activities and interpersonal communication. However, in contrast to the Western cultural norms and characteristics that consider individual-centric and fully autonomous way of functioning as important at the time of adolescence, and especially in junior high school, Chinese cultural pays less attention to self-esteem (Yang, 2013), which means less respect for teenagers. This was also reported by some of the participants during the interview—they are not given the respect that is normally afforded to adults. Teenagers are in the key period of individual development; therefore, any disrespectful or less respectful behaviors of close relationships can easily induce negative emotions,

such as feeling inferior, whose adverse influences would last longtime. Second, some previous studies reported that respect is often regarded as a kind of social support (such as recognition, trust, respect, and help) which has been proven to have some influence on teenagers, but studies have not paid sufficient attention to this need for respect. This study finds that respect is a significant aspect in social support and the extent they receive respect determines the extent teenagers' experience negative emotions. Huo and Binning also have shown that respect/being respected plays a momentous role in regulating the intra-group relationship and can affect individuals' emotions (Huo, 2010). In addition, although both respect and self-esteem have a bearing on teenagers' developing negative emotions, teenagers' attitudes and needs for both are vary. Studies have shown that self-esteem refers to the internal respect of individuals—that is, a person's desire to be strong, competent, confident, and independent in different situations. Respect refers to an individual's external respect; that is, a person wants to have social status, prestige, and positive evaluation from others (Huang, 2010). Pattern 2 and Pattern 3 seem to overlap in some content but are sufficiently distinct from another. Thus, to some extent, teenagers have different levels of needs and different attitudes towards respect and self-esteem.

6 CONCLUSION

By Q methodology, this study explored four view patterns of triggering negative emotions in teenagers. Our findings showed that parental behavior greatly affected the emotions of teenagers; they have a strong expectation and desire for respect from others; they have strong sense of self-esteem and are averse to verbal and nonverbal or physical violence; and they are averse to severe discipline and punishment. Besides, different types of interpersonal behaviors have different relations in inducing teenagers' negative emotions. Parents' behaviors are mainly related to respect and self-esteem; recognition and acceptance; warmth and understanding; and severe discipline and punishment. Teachers' behaviors are mainly related to respect and self-esteem and severe discipline and punishment. Peer behaviors are mainly related to respect and self-esteem.

There are some limitations to the findings of this study. First, the concourse is not wide enough, so the perspectives reflected are limited. Another limitation is the age range of participants enrolled in our study—participants were junior high school students (aged 12–15 years), which restricts the extent of

generalizability of our findings, because participants from different age groups may have diverse views on this topic. In the context of the present study and our findings, we believe it will be useful for researchers to study in future individuals belonging to other age groups and demographic profiles in order to arrive at more robust findings to help further research.

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APPENDIX

| | Statement | Type |
|----|--|------|
| 1 | Parent often compare me with others. | A |
| 2 | Parent put a lot of pressure on me if I get unsatisfied school performance. | A |
| 3 | Parent refuse me with harsh words when I ask them for money. | B |
| 4 | Parent often quarrel in front of me. | C |
| 5 | Parent oppose and even show contempt on my interests. | A |
| 6 | Parent scolded me with harsh word, such as "Stupid pig", "Fool", "What a shame". | B |
| 7 | Parent often talk my shortcomings and embarrassing things in front of others. | B |
| 8 | Parent do things I dislike in the name of being good to me. | B |
| 9 | Parent don't keep their word. | B |
| 10 | Parent never admire and encourage me, but ridicule me a lot. | A |
| 11 | My parents excessively interfered with my freedom of social activities. | D |
| 12 | My parents infringe my privacy. | B |
| 13 | Parent have bad hobbies, such as smoking, alcohol abuse and gambling. | E |
| 14 | Parent punish me with pinching/ hitting/ kicking. | F |
| 15 | My parents often lose his temper when he is unhappy. | E |

| | | |
|----|---|---|
| 16 | Parent don't listen when I talk to them. | B |
| 17 | When I am bullied, my parent asks me to tolerate it, even blame me making trouble. | C |
| 18 | Parent are excessively protective and intruding upon my lives. | D |
| 19 | Parent directly cut off the Internet, or confiscate my phone to stop me playing game. | F |
| 20 | Parent spend all day playing phone, but never allow me to, they scold me if I do so. | G |
| 21 | Teachers reproach us if we don't do good in the exam. | A |
| 22 | Teachers compare me with others. | A |
| 23 | Teachers directly criticize by name in the class and corporal punish students. | F |
| 24 | Teachers don't show recognition or trust on me. | A |
| 25 | Teachers assign too much homework, and will assign more if we don't finish them on time. | F |
| 26 | Teachers treat elite students much better than average students. | G |
| 27 | Teachers often report to or call students' parents to school when the students don't do good. | F |
| 28 | Teachers don't respect students in many ways. | B |
| 29 | My teacher calls me stupid if I don't understand what he teaches. | A |
| 30 | Teachers suppress students, using their prestige or the authority of school leaders. | F |
| 31 | Teachers regardless of students' self-esteem, ridicule students. | B |
| 32 | Teachers criticize students to parental WeChat group. | F |
| 33 | Teachers don't care for students' confusion or plight, but wrongly blame students. | C |
| 34 | Teachers scold their students when they don't listen. | F |
| 35 | Teachers make bad comments on students' family when they criticize their students. | B |
| 36 | Unable to answer the question, my teacher impatiently and coldly says "Sit down". | C |
| 37 | Classmates scold me, "You are a pig", "Garbage", "Stupid", and so on. | B |
| 38 | Classmates give me nicknames or make fun of my image with unfriendly words. | B |
| 39 | Classmates ridicule my school performance. | C |
| 40 | Classmate infringe on my privacy, say something bad about me, and so on. | B |
| 41 | Good friends ignored me completely when they have fun with others. | C |
| 42 | Classmates show off their good exam score to provoke me. | C |
| 43 | Classmates are uncivilized, throwing things casually, taking my things without asking me. | E |
| 44 | Classmate tells others my secret. | B |
| 45 | Classmate is selfish, without thinking of others. | G |
| 46 | Classmates talk about my family members and family background in front of others. | B |
| 47 | Classmates show off their superiority to others. | E |
| 48 | Classmates hit others. | E |

Types of behavioral characteristics: A--recognition and acceptance; B--respect and self-esteem; C--warmth and understanding; D--excessive involvement and protection; E--others' habits and characters; F--severe discipline and punishment; G--equality and fairness.