# Interpersonal Complementarity - Self-rated Behavior by Normal and Antisocial Adolescents with a Liked and Disliked Peer

Kerstin Armelius<sup>1</sup> and Camilla Hakelind<sup>2</sup>

University of Umeå, Sweden

#### **Abstract**

The principle of complementarity in interpersonal theory and the SASB model (Structural Analysis of Social Behavior) as developed by Benjamin (1974) were used to study how adolescents in a normal group of 60 adolescents and a group of 42 adolescents with severe behavioural problems rated that they usually behaved in relation to a liked and disliked peer. The peer's behaviour varied in a systematic way on the dimensions of affiliation and dominance. Complementary behavior was defined as the same behaviour from peer and self and anticomplementarity was defined as opposite behaviour from self in relation the peer's behavior. Consistent over the two groups complementarity and anticomplementarity were influenced by both the peer's behaviour and type of relationship with the peer. Friendly behaviour from a liked peer evoked much more complementary friendly behaviour compared to a disliked peer who with the same behaviour evoked almost as much anticomplementary hostile behaviour as complementary friendly behaviour. Hostile behaviour from a disliked peer evoked much more complementary hostile behaviour compared to a liked peer with the same kind of behavior. Autonomy granting from a liked peer evoked more complementary autonomous behaviour compared to a disliked peer. Differences between the two groups were small and only in relation with a disliked peer. The results were discussed in terms of interpersonal theory and the principle of complementarity with focus on kind of relationship.

Key words: adolescents' interpersonal behavior; peer relationship

Adolescents' Self-rated Feelings and Behaviour in Different Situations with a Liked and Disliked Peer

#### Relation to peers

Peers play an important role in an adolescent's development from child to adult. During adolescence, peers become increasingly important for emotional well-being, while the parents' role decreases. In company with peers, adolescents start to separate from their parents and to move into the adult world. Peer relationships are important for psychological health and adjustment in adolescence (Rice & Dolgin, 2002) and as shown by Lansford, Criss, Pettit, Dodge and Bates (2003) positive relations with peers can even moderate the relation between negative parenting and adolescents' negative behaviour.

<sup>&</sup>lt;sup>1</sup> Kerstin Armelius, Department of Psychology - University of Umeå. 901 87 Umeå, Sweden. Fax: +46907866695 / Phone: +46907866349. E-mail: kerstin.armelius@psy.umu.se

<sup>&</sup>lt;sup>2</sup> Camilla Hakelind, Department of Psychology - University of Umeå. 901 87 Umeå, Sweden. Fax: +46907866695 / Phone: +46907865408. E-mail: Camilla.hakelind@psy.umu.se

Many different factors will influence interactions between peers. One such factor that will influence both feelings and behaviour elicited in different situations with a peer is who the peer is or the kind of relationship that is involved. For example as shown by Rumbaug Whitesell, and Harter (1996) reactions to an anger provoking situation differ between a close friend and a classmate. A study by Goldstein and Tisak (2004) showed that negative situations with an acquaintance evoked more aggression compared to the same situation with a friend. Carlson Jones, Burrus Newman, and Bautista (2005) found that generally teasing comments from a friend were interpreted in a more positive way compared to teasing from a neutral classmate. Lemerise and Arsenio (2000) also included the affective nature of the relationship with a peer as an important factor in their model of social information processing in children.

#### Interpersonal theory and the SASB model

Studies of peer interaction have mainly focused on problematic or ambiguous situations such as teasing, peer rejection, provocations, aggression and conflict and a systematic description of peer's behavior is rare. The present study is an attempt to use interpersonal theory (see e.g. Kiesler, 1996) to describe interpersonal behaviour both from the peer and from self toward the peer. Within interpersonal theory, a number of circumplex models have been formulated to describe interpersonal behavior. One of the most elaborate is Benjamin's (1974) Structural Analysis of Social Behavior (SASB). Compared to other circumplex models the SASB model has in common with those the dimensions of affiliation and control but the SASB model divides the control dimension into two surfaces or focus (Ericson & Pincus, 2005). The first describes actions from one person to another person (i. e. a transitive focus); the second describes reactions to another person's behavior (i. e. an intransitive focus). Whereas the dimension of affiliation varies from friendly and hostile on both focus an actions and reactions, the dimension of control varies from autonomy granting and control on the surface of acting and from autonomy taking and submission on focus on reactions. The SASB model thus enables a description of two different kinds of autonomous behaviour (autonomy granting and emancipating/autonomous) in relationships that is not possible with the other models. For each focus, the two dimensions are combined into eight clusters in a circumplex structure that orders interpersonal behavior around the two dimensions. The cluster version of the model is shown in Figure 1.

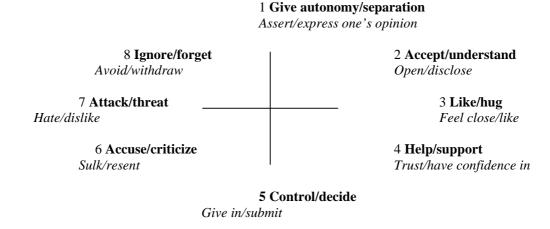


Figure 1. The cluster version of the SASB-model (focus acting = bold style, focus reacting = italics). The numbers refer to clusters.

Clusters on the right of the model (clusters 2, 3 and 4) describe friendly and moderately interdependent interpersonal behavior. Clusters on the left (clusters 6, 7 and 8) describe hostile and moderately interdependent behavior. Cluster 1 describes autonomy granting behaviour with focus on actions and autonomy taking behaviour with focus on reactions. Cluster 5 with focus on actions describes controlling/dominant behavior, and submissive behaviour with focus on reactions.

The SASB model has been used in a number of studies in many different areas such as therapy process and outcome, diagnostic studies of psychopathology, sports psychology, personality psychology and family processes (see Benjamin, 1996 and Benjamin, Rothweiler, & Critchfield, 2006, for an overview of studies with the SASB model). With samples of adolescents and young adults SASB has been used to study the relation between family processes and adolescents' problematic behavior and symptoms (Florsheim, Henry, & Benjamin, 1996; Ratti, Humphrey, & Lyons, 1996). SASB has also been used to compare how adolescents with antisocial problems differ from normal adolescents in their perception of their mother and father (Östgård-Ybrandt & Armelius, 2004), how adolescents' self-image is related to well-being and psychological functioning (Adamsson, 2003) and how fear of failure is related to representations of self and parents (Conroy, 2003).

# The principles of complementarity and anticomplementarity

The SASB model facilitates a systematic description of interpersonal behavior. It also enables us to describe both own and other's behavior using the same model. The model also makes it possible to use some interpersonal concepts such as complementarity to describe and predict interpersonal behavior. According to the complementarity principle, interpersonal behavior is not random. Instead our interpersonal behavior invites, pulls or

evokes restricted classes of behavior from persons with whom we interact (Kiesler, 1996). For example, friendly behavior tends to evoke friendly behavior, hostile behavior tends to evoke hostile behavior and so on. Anticomplementarity may be defined as behaviour that is opposite of what is expected, when hostile behaviour is responded to with friendly behaviour, and when friendly behaviour is responded to with hostile behaviour. With these principles it is thus possible to predict what will happen in an interaction between two persons.

A number of studies have found some support for the complementarity principle. Many of these early studies have been in the context of psychotherapy. For example Dietzel and Abeles (1979) found that therapist complementarity varied over sessions in a systematic way. Kiesler and Watkins (1989) showed that therapist complementarity was associated with both patient's and therapist's perception of working alliance. Tracey and Hays (1989) found that more experienced therapists showed lower complementarity for hostile-dominant stimuli compared to less experienced therapists who thus were more "drawn into" the patient's negative relational style. The principle of complementarity seems to hold also in other contexts (Strong et al., 1988; Bluhm, Widiger, & Miele, 1990). While there is clear support for complementary behaviour on the affiliation dimension (friendly behaviour tends to pull for friendly behaviour and hostile behaviour pulls for hostile behaviour) the results are less consistent for dominant - submissive behaviors (see Sadler & Woody, 2003 for a discussion). However, in their very elegant study Sadler and Woody (2003) made elaborate tests of the complementarity principle in mixed-sex adult dyads and found clear support for complementarity on both the affiliation and dominance dimensions. They also found very small gender differences in complementarity.

#### Purpose

The main purpose of the present study was to study how adolescents rate that they usually behave in relation to a liked and a disliked peer when the peer's behaviour toward them varied in a systematic way on the dimensions of affiliation and control/autonomy, and in that context use the complementarity principle to describe the adolescents' behaviour from self in reaction to the peer's behaviour. According to the complementarity principle defined as the behaviour from self located on the same positions in the SASB model as the peer's behaviour, a general hypothesis was that friendly behaviour from the peer will elicit friendly behaviour from self, hostile behaviour from the peer will elicit autonomous behaviour from self, and controlling behaviour from the peer will elicit submissive behaviour from self. A second general hypothesis was that irrespective of behaviour a liked peer will invite more friendly and less hostile behaviour from self compared to reactions to the same behaviour from a

disliked peer. From these two general hypotheses it was possible to formulate four specific hypotheses about complementary and anticomplementary friendly and hostile behaviour from self. First, complementary friendly behaviour (friendly behaviour from self when the peer was friendly) was expected to be higher with a liked peer compared with a disliked peer. Second, complementary hostile behaviour (hostile behaviour from self when the peer was hostile) was expected be lower with a liked peer compared to a disliked peer. Third, anticomplementary friendly behaviour (friendly behaviour from self when the peer was hostile) was expected to be higher with a liked peer compared to a disliked peer and fourth, anticomplementary hostile behaviour (hostile behaviour from self when the peer was friendly) was expected to be higher with a disliked peer compared to a liked peer. We had one specific hypothesis about differences between a liked and a disliked peer for the dimension of interdependence (control/submission and autonomy granting/taking). Since some studies indicate that autonomy granting together with affiliation is generally perceived as more positive (Noom, Dekovic, & Meeus, 1999) we expected that autonomy granting from a liked peer compared to a disliked peer would elicit more complementary autonomous behaviour.

There were two study groups in the present study. One was a group of normal adolescents aged 15 to 18 years. In the present study we also included a group of adolescents with severe behavioural problems as a comparison for the generalizability of the results, but differences between the two groups were not in focus in the study.

# Method

# **Participants**

Normal group. The group of adolescents was a random sample of 60 adolescents, of whom 30 were girls and 30 boys. Their mean age was 16.7 years (15 to 18 years) and the majority 70 % was between 16 and 17 years old for both girls and boys. They were selected from the population register in the town of Umeå, which is located in the north of Sweden and has about 100.000 inhabitants. The selection process was random, but subject to constraints as regards gender, age, and area (different areas of town were represented in order to include variation in social background). The adolescents in this group had no known psychiatric or social problems. The adolescents in the group also took part in a study to determine norms for an interview that is used with adolescents in different clinical settings in Sweden.

Antisocial group. The antisocial group consisted of 42 adolescents, 26 girls and 16 boys, with a mean age of 16.6 years (13 to 23 years). Thirty-six of these were in treatment in Sweden in terms of the Care of Young Persons Act (LVU). The purpose of this treatment is to help young people with severe psychosocial problems to develop and mature and to equip

them for a life without drugs, violence and crime. The act is applied in situations where an adolescent's health and development are at risk in his or her home or through his or her own destructive behavior such as drug abuse and criminal or destructive social behavior. Treatment is compulsory and is carried out in special residential centers run by the Swedish Board of Institutional Care. The length of treatment varies from a few weeks to several years. The adolescents participating in the present study came from four centers that were participating in a larger project evaluating this kind of treatment (Armelius & Hägglöf, 1998). The adolescents had been diagnosed using the DSM system (American Psychiatric Association, 1994), with the most common diagnoses being conduct disorder (80%), drug abuse (66%) and major depression (64%). In addition, six adolescents in voluntary treatment under the Social Services Act also participated in the present study. These adolescents also had severe behavioral and social problems, but treatment was on a voluntary basis and no DSM diagnosis had been made.

#### Procedure

Participation in the study was voluntary. Adolescents were approached by members of the research team at school and at the residential homes and given a letter to inform their parents asking for their consent to participate in the study. If they agreed to participate, they were asked to fill in the questionnaire used in the present study, which was administrated together with other questionnaires used in the larger project, and completed in the presence of the member of the research team who answered any questions that the adolescent might have. Most parents and adolescents agreed to participate in the study. Reasons for not attending were in the normal group mainly absence from school on the day that the study was done, and in the residential homes mainly due to cognitive difficulties. All participants were given a cinema ticket to thank them for their participation.

#### Instrument

The questionnaire used in the present study was based on the SASB model described earlier. The eight clusters that focus on actions were formulated as a short vignette with a peer described as acting toward the test person. The adolescents were told to imagine that they interacted with a peer who behaved in the way described toward them. For example, cluster 4 was formulated as, "He/she helped/supported me", cluster 5 as, "He/she controlled me/decided what I should do" and so on for the remaining six clusters. The eight vignettes thus described eight different kinds of behaviour from the peer and the adolescents were asked to answer three questions: When this behaviour from the peer occurs, what do you usually do? What do you usually feel? How often does this behaviour from the peer occur? In the present paper, the results for question one is used.

To answer the question about interpersonal behavior, the subjects could choose between sixteen alternatives corresponding to the eight clusters with focus on actions and the eight clusters with focus on reactions in the SASB model. For each vignette the adololscents could choose as many of the response alternatives for behaviour as they wanted. In the vignettes, as in Figure 1, we used two different words to describe the peer's behavior. This was also done for the sixteen response alternatives, and the adolescents were told that one or the other meaning could apply, and not necessarily both.

When filling in the questionnaire, the subjects were instructed to answer the questions first while thinking of their relationship to a peer that they liked and got along with very well, and next they were asked to respond to the same vignettes, but this time while thinking about another peer whom they did not like and got along with. They could choose whoever they wanted.

#### Measures

Three measures of interpersonal behavior from self were computed using the circumplex structure of the response alternatives. Friendly interpersonal behavior was computed as the sum of responses in clusters 2, 3 and 4 with focus on actions and reactions. Hostile interpersonal behavior was computed as the sum of responses in clusters 6, 7 and 8 with focus on actions and reactions. Autonomous behaviour was computed as the sum of responses in cluster 1 with focus on actions and reactions. Cronbach's alpha was 0.80 for friendly behaviour and 0.86 for hostile behaviour and 0.65 for autonomous behavior. The remaining two response alternatives out of sixteen to be controlling or submissive were not analysed due to low frequencies.

These measures were used to define complementary and anticomplementary behaviour toward the peer. Complementary behaviour was defined as behaviour located on the same position in the SASB model as the description of the peer's behaviour. Anticomplementary behaviour was defines as behaviour located on the as opposite position compared to the peer's behavior. Thus, friendly behaviour from self is complementary with the peer's behaviour in vignettes 2, 3 and 4 (the peer is friendly and behaviour from self is friendly), and anticomplementary with the peer's behaviour in vignettes 6, 7 and 8 (the peer is hostile and behaviour from self is hostile) and anticomplementary with the peer's behaviour in vignettes 6, 7 and 8 (the peer is hostile and behaviour from self is hostile) and anticomplementary with the peer's behaviour in vignettes 2, 3 and 4 (the peer is friendly and behaviour from self is hostile). Autonomous behaviour is complementary with the peer's behaviour in vignette 1 (the peer is autonomy granting and behaviour from self is autonomous) and anticomplementary with the peer's behavior in vignette 5 (the peer is controlling and behaviour from self is autonomous).

# Statistical analyses.

For each vignette and each group all measures were subjected to a 2-way (liked and disliked peer) ANOVA with repeated measures. The two groups were compared with independent t-test.

#### Results

Commonly the adolescents chose one or two response alternative when answering questions about each vignette and there were no significant difference between mean numbers of responses chosen for a disliked peer and liked peer or between the two groups.

## Friendly behaviour from self

In both groups all three kinds of friendly behaviour from a liked peer elicited more complementary friendly behaviour compared to a disliked peer. When the peer was described as understanding (vignette 2), F(1, 59) = 61.27, p < .00 in the normal group, and F(1, 41) = 38.56, p < .00 in the antisocial group, when the peer was described as liking (vignette 3), F(1, 59) = 92.92, p < .00, in the normal group and F(1, 41) = 45.81, p < .00 in the antisocial group and when the peer was described as supporting (vignette 4), F(1, 59) = 46.06. p < .00 in the normal group and F(1, 41) = 45.49, p < .00 in the antisocial group. There were no significant differences in anticomplementary friendly behaviour (friendly behaviour from self when the peer was hostile) toward a liked and a disliked peer. The results are shown in figure 2 and 3 for each group respectively.

#### Friendly behavior from self. Normal group.

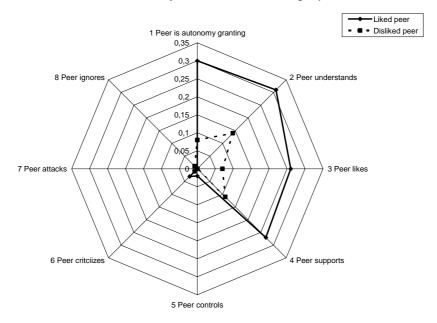


Figure 2. Friendly behaviour with a liked and disliked peer in the normal group.

#### Friendly behavior from self. Antisocial group.

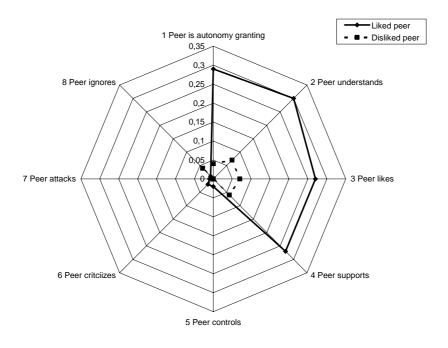


Figure 3. Friendly behaviour with a liked and disliked peer in the antisocial group

# Hostile behaviour from self

In both groups a disliked peer described as criticizing (vignette 6) and as attacking (vignette 7) evoked more hostile behaviour compared to a liked peer with the same behaviour. In vignette 6 F(1, 59) = 7.79, p < .01 in the normal group and F(1, 41) = 13.23, p < .00 in the antisocial group and in vignette 7, F(1, 59) = 96.43 in the normal group, and F(1, 41) = 13.23.

41) = 5.11, p < .03 in the antisocial group. In both groups a disliked peer evoked more anticomplementary hostile behaviour (hostile behaviour from self when the peer was friendly) and this was true for all three kinds of friendly behaviour from the peer. In vignette 2 F(1, 59) = 7.79, p < .01, in the normal group and F(1,41) = 10.15 p < .00 in the antisocial group, in vignette 3, F(1, 9) = 17.56, p < .00 in the normal group and F(1, 41) = 8.78, p < .01 in the antisocial group, and in vignette 4 and F(1, 59) = 16,.92, p < .00 in the normal group and F(1, 41) = 8.05, p < .00 in the antisocial group. The results are shown in Figure 4 and 5 for each group respectively.

#### Hostile behavior from self. Normal group.

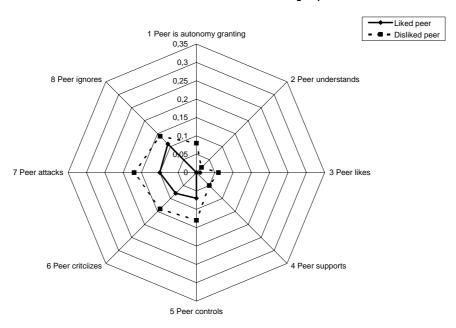


Figure 4. Hostile behaviour with a liked and disliked peer in the normal group.

# 1 Peer is autonomy granting 0,35 0,3 0,25 2 Peer understands 7 Peer attacks 4 Peer supports

#### Hostile behavior from self. Antisocial group.

Figure 5. Hostile behaviour with a liked and disliked peer in the antisocial group.

5 Peer controls

### Autonomous behaviour from self

In the normal group a liked peer compared to a disliked peer evoked more complementary autonomous behaviour (autonomous behaviour from self when the peer was autonomy granting), F(1, 58) = 5.9, p < .02. The tendency was the same in the antisocial group but not significant (p < .11). In the antisocial group a liked peer compared to a disliked peer evoked more anticomplementary autonomous behaviour (autonomous behaviour from self when the peer was described as controlling), F(1,41) = 5.96, p < .01, while in the normal group autonomous behavior from self toward peer's control was almost exactly the same with a liked and a disliked peer. The results are shown in Figures 6 and 7 for each group respectively.

#### Autonomous behavior from self. Normal group.

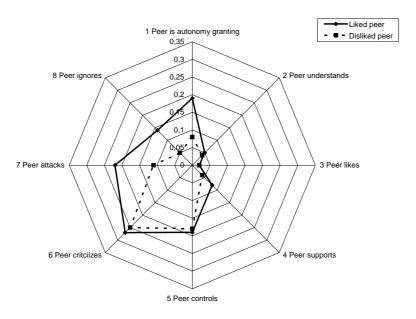


Figure 6. Autonomous behaviour with a liked and disliked peer in the normal group.

#### Autonomous behavior from self. Antisocial group.

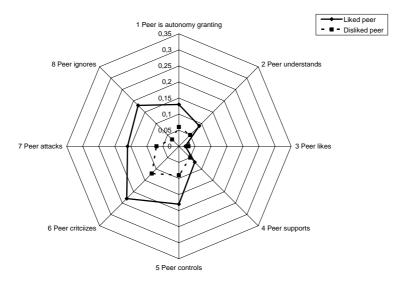


Figure 7. Autonomous behaviour with a liked and disliked peer in the antisocial group.

# Differences between the normal and antisocial group

There were no significant differences between the two groups in behaviour from self with a liked peer. With a disliked peer complementary friendly behaviour (friendly behaviour from self when the peer was friendly) was higher in the normal group compared to the antisocial group in vignette 2, when the peer was described as understanding, t(100) = 2.9, p < .00 and in vignette 4, when the peer was described as supporting, t(100) = 2.7, p < .01.

Anticomplementary friendly behaviour (friendly behaviour from self when the peer was hostile), was higher in the antisocial group compared to the normal group when a disliked peer was described as ignoring (vignette 8), t(100) = -2.85, p < .01. Anticomplementary hostile behaviour (hostile behaviour from self when the peer is friendly) was higher in the antisocial group in vignette 2, when a disliked peer was described as understanding compared with adolescents in the normal group, t(100) = -2.31, p < .03. Adolescents in the normal group rated more autonomous behaviour with a disliked peer who was controlling (vignette 5) and criticizing (vignette 6) compared to adolescents in the antisocial group, t(100) = 2.81, p < .01 and t(100) = 2.15, p < .03 respectively.

#### Discussion

As expected, generally friendly behaviour from a liked peer stimulated much more complementary friendly behaviour compared to the same behaviour from a disliked peer. Anticomplementary hostile behaviour (hostile behaviour when the peer was friendly) was also as expected higher with a disliked peer compared to a liked peer. In fact, the results showed that in the antisocial group friendly behaviour from a disliked peer evoked nearly as much anticomplementary hostile behaviour as complementary friendly behaviour and there was the same tendency in the normal group. Thus behaviour from a liked and a disliked peer who were described as having the same friendly behaviour toward the adolescents invited different behaviour from adolescents in both groups and the same behavior from a peer seemed to be experienced very differently depending on type of relationship. When the peer was liked the complementarity principle predicted behaviour very well but not when the peer was disliked. In terms of interpersonal theory (Kiesler, 1996) the difference in complementarity with a liked and a disliked peer with friendly behaviour is important for how a relationship might develop and change. With a disliked peer the probability of negative circles is increased if friendly behaviour does not evoke friendly behaviour. In these situations with a disliked peer the adolescents react in a more unexpected way when viewed from the behavior from the peer. Further, being less friendly and even hostile increases the probability to elicit less friendly behaviour in the other person. Therefore the interpersonal behaviour of the adolescents would push the disliked peer into acting less friendly and thus confirm their negative image of the peer.

Also as expected hostile behaviour from a disliked peer elicited more complementary hostile behaviour compared to the same behaviour from a liked peer. Generally the adolescents rated more hostile behaviour with a disliked peer compared to a liked peer irrespective of what kind of behaviour was involved. These results are in line with the discussion by several authors that adolescents' behaviour toward a peer is influence by how

important it is to preserve that relationship (Borbely, Graber, Nichols, Brooks-Gunn, & Botwin, 2005; Carlson Jones, et al., 2005; Lemerise & Arsenio, 2000). As suggested by Lemerise and Arsenio (2000) the importance to continue to be liked by a peer whom you want as a friend, might influence the choice of behavior toward the peer. To react with hostile behavior might jeopardize the relationship with a liked peer and hostile complementarity would therefore be lower with a liked peer compared to a disliked peer with the same behavior.

Not expected was the result that there was no difference between a liked and a disliked peer in anticomplementary friendly behaviour (friendly behaviour from self when the peer was hostile) and this kind of behaviour from self was almost nonexistent in both groups. Hostile behaviour from a peer thus seems to be experienced in a negative way also with a liked peer and this behaviour did not evoke friendly behavior. Rumbaugh Whitesell and Harter (1996) and Carlson Jones et al. (2005) found that the topic or feature of ambiguous or negative behavior from a liked peer is important for how it is experienced and that some topics have a negative impact regardless of emotional tie to the peer and this seems to hold also in the present study.

The results for complementary autonomous behaviour from self were also rather consistent over the two groups and this behaviour was more common with a liked peer who was autonomy granting compared to a disliked peer with the same behaviour although the difference did not reach significance in the antisocial group. As discussed by Noom, Dekovic, and Meeus (1999) mentioned earlier, autonomy is an important developmental goal in child rearing. However, as also is discussed by Noom, Dekovic, and Meeus (1999), adolescents still need a stable base of attachment in order to be able to explore the world. Developing autonomy thus requires a positive relationship with parents. A study by Pincus, Dickinson, Schut, Castonguay, and Bedies (1999) using the SASB model found that less autonomy granting from parents was related to deviant attachment patterns. Even if these studies have focused on parental relationships the same general pattern of an association between autonomy granting and positive attachment may hold also for relations to peers. Consequently, autonomy granting by a liked peer may be experienced in a positive way, while being given autonomy by a disliked peer may be experienced as more difficult to handle and thus evoke less complementary autonomous behaviour and a disliked peer who is autonomy granting may even be met by hostility as seen in Figure 6 and 7 in the present study.

In contrast to the results for complementary autonomous behaviour from self the result when the peer was described as controlling was less consistent over the two groups. In the normal group anticomplementary autonomous behaviour (autonomous behaviour from self when the peer was controlling) did not differ between a liked and a disliked peer. In the

antisocial group control from a liked peer evoked more autonomous behaviour compared to a disliked peer. Our results indicate that autonomy might be a way to handle conflicts with peers since not only control but also hostile behaviour from the peer were met with autonomous behaviour and this was most pronounced with a liked peer in both groups. As pointed out by many authors autonomy is a very complex concept. As shown by Hmel and Pincus (2002) the concept may be conceptualized as agency and self-governance and this definition of autonomy is close to the definition used in the present study; i. e. to express your own view and tell the peer what you think and to tell the peer to do as he/she likes. The ability to stand up for your own view underlies competent conflict resolutions and increases the probability to solve conflicts in a non aggressive way which may be more important with a liked peer compared to a disliked peer.

There are a number of shortcomings in the present study. First, ratings of interpersonal behavior are not equal to actual behavior. Another shortcoming is that we had no control over the peer that the adolescents choose to think of when filling in the test. This may have influenced our results in an unknown way. The differences in responses to a liked and disliked peer are, however, more unlikely to have been due to that factor. A third shortcoming is that there are behaviours that were not covered by the alternatives given in the questionnaire. Also we did not capture the reciprocal influence of behaviour as it may evolve over time which could have made our results more stereotyped. Further, the measurement did not capture controlling and submissive behaviour from self due to low response frequencies. We considered using scales for each of the sixteen possible responses for each vignette. However, since this would have meant that the adolescents had been required to answer sixteen (response alternatives) times eight (vignette) times two (peer) questions this option would have made the instrument to cumbersome to use. Nonetheless the results for autonomous behaviour showed that this kind of behaviour is important to include in measures of interpersonal behaviour. Finally, the vignettes used did not capture more complex behavior from the peer which might have resulted in too simple responding. In conclusion, our results clearly show that across all vignettes complementary and anticomplementary interpersonal behaviour were influenced by both type of behaviour, as predicted from the principle of complementarity, and type of relationship, which is a causal factor not accounted for in this principle. Thus, to fully understand interpersonal behaviour it is necessary to take into account both the type of behaviour involved in the interaction and the type of relationship involved. Finally, it seems like the principle of complementarity generally can predict behaviour better with a liked compared to a disliked peer.

#### References

- Adamsson, L. (2003). Adolescents' self-concept consistency and the transition from inconsistency to consistency. Psychology, 10(2), 202-213.
- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders. (4th ed.). Washington, DC: Author.
- Armelius, B-Å. & Hägglöf, B. (1998). *Psychological problems among adolescents with behavioural problems*. Department of Psychology, University of Umeå, Sweden.
- Benjamin, L. S. (1974). Structural analysis of social behavior. Psychological Review, 81, 392-425.
- Benjamin, L. S. (1996). *Introduction to the special section on Structural Analysis of Social Behavior*. Journal of Consulting and Clinical Psychology, 64(6), 1203-1212.
- Benjamin, L. S., Rothweiler, J. C., & Critchfield, K. L. (2006). The use of Structrual analysis of Social Behavior (SASB) as an assessment tool. Annual Review of Clinical Psychology, 2(12), 1-27.
- Bluhm, C., Widiger, T. A., & Miele, G. M. (1990). *Interpersonal complementarity and individual differences*. Journal of Personality and Social Psychology, 58(3), 464-470.
- Borbely, C., Graber, J., Nichols, T., Brooks-Gunn, J., & Botvin, G. (2005). Sixth graders' conflict resolution in role plays with a peer, parent, and teacher. Journal of Youth and Adolscence, 34(4), 279-291.
- Carlson Jones, D., Burrus Newman, J., & Bautista, S. (2005). A three-factor model of teasing: The influence of friendship, gender, and topic on expected emotional reactions to teasing during early adolescence. Social Development, 14(3), 421-439.
- Conroy, D. (2003). Representational models associated with fear of failure in adolescents and young adults. Journal of Personality, 71(5), 757-784.
- Dietzel, C. S. & Abeles, N. (1979). Client-therapist complementarity and therapeutic outcome. Journal of Counselling Psychology, 23(4). 264-272.
- Erickson, T. M. & Pincus, A. L. (2005) Using Structural Analysis of Social Behavior (SASB) measures of self- and social perception to give interpersonal meaning to symptoms. Anxiety as an example. Assessment, 12(3). 243-254
- Florsheim, P., Henry, W., & Benjamin, L. (1996). Integrating individual and interpersonal approaches to diagnosis: the Structural Analysis of Social Behavior and attachment theory. In Kaslow, F. (Ed.). Handbook of Relational Diagnosis. New York, Wiley & Sons.
- Goldstein, S. & Tisak, M. (2003). Adolescents' outcome expectancies about relational aggression within acquaintanceships, friendships, and dating relationships. Journal of Adolescence, 27(3), 283-302.
- Hmel, B. & Pincus, A. L. (2002). The meaning of autonomy: On and beyond the interpersonal circumplex. Journal of Personality, 70(3), 277-310.

- Kiesler, D. J. (1996). Contemporary Interpersonal Theory and Research. Personality, Psychopathology, and Psychotherapy. New York: Wiley.
- Kiesler, D. J. & Watkins, L. M. (1989). *Interpersonal complementarity and the therapeutic alliance: A study of the relationship in psychotherapy*. Psychotherapy, 26(2). 183-194.
- Lansford, J., Criss, M., Pettit, G., Dodge, K., & Bates, J. (2003). Friendship quality, peer group affiliation, and peer antisocial behaviour as moderators of the link between negative parenting and adolescent externalizing behavior. Journal of Research on Adolescent, 13(2). 161-184.
- Lemerise, E. & Arsenio, W. (2000). An integrated model of emotion processes and cognition in social information processing. Child Development, 71(1), 107-118.
- Noom, M. J., Dekovic, M., & Meeus, W. H. J. (1999). Autonomy, attachment and psychosocial adjustment during adolescence: A double-edged sword? Journal of Adolescence, 22(1), 771-778.
- Pincus, A. L., Dickinson, K. A., Schut, A. J., Castonguay, L. G., & Bedies, J. (1999). *Integrating interpersonal assessment and adult attachment using SASB*. European Journal of Personality Assessment, 15(3), 206-220.
- Ratti, L. A., Humphrey, L. L., & Lyons, J. S. (1996). Structural analysis of families with a polydrug dependent, bulimic, or normal adolescent daughter. Journal of Consulting and Clinical Psychology, 64, 1255-1262.
- Rice, F. P. & Dolgin, K. G. (2002). *The adolescent: Development, relationships, and culture.* Boston: Allyn and Bacon.
- Rumbaugh Whitesell, N. & Harter, S. (1996). The interpersonal context of emotional anger with close friends and classmates. Child Development, 67(4), 1345-1350.
- Sadler, P. & Woody, E. (2003). Is who you are who you're talking to? Interpersonal style and complementarity in mixed-sex interactions. Journal of Personality and Social Psychology, 84(1), 80-96.
- Strong, S. R., Hills, H. I., Kilmartin, C. T., DeVries, H., Lanier, K., & Nelson, B. N. et al. (1988). The dynamic relations among interpersonal behaviors: A test of complementarity and anticomplementarity. Journal of Personality and Social Psychology, 54(5), 798-810.
- Tracey, T. J. & Hays, K. (1989). Therapist complementarity as a function of experience and client stimuli. Psychotherapy, 26(4), 462-468.
- Östgård-Ybrandt, H. & Armelius, B-Å. (2004). Self-concept and perception of early mother and father behavior in normal and antisocial adolescents. Scandinavian Journal of Psychology, 45(5), 437-447.

# **Authors note**

This study was supported by a grant to the first author from the National Board of Institutionalized Care in Sweden.