

THE FACE AS A DETERMINING FACTOR FOR SUCCESSFUL SOCIAL MANIPULATION: RELATIONAL AGGRESSION, SOCIOMETRIC STATUS, AND FACIAL APPEARANCE

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Abstract

Appearance has been shown to affect the way humans behave, specifically through the self-fulfilling prophecy effect. The purpose of this study was to find a link among sociometric status, relational aggression and facial structure. A sample of seventh and eleventh grade participants assessed their peers for dominance, popularity, relational aggression and prosocial behavior. College participants then rated photographs of the younger participants for dominance, facial maturity and attractiveness. As predicted, dominant behaviors were positively correlated with both relational aggression and a dominant appearance. Other significant relationships emerged. These results further support the self-fulfilling prophecy effect, while indicating attractiveness as a powerful predictor of sociometric status.

Introduction

Girls and boys, and men and women, use different social and aggressive strategies to achieve their goals. Very young children typically rely on overt aggressive behaviors, such as verbal threat and physical assault, as a way of getting what they want (Wright, Zakriski, & Fisher, 1996). As children move into adolescence, boys and girls develop more subtle, indirect forms of aggressive behaviors, including social manipulation (Bjoerkqvist, Lagerspetz, & Kaukiainen, 1992). Some children persist in acting out aggressively into late development and it is possible that physical appearance, especially facial appearances, contributes to this tendency (Langlois, 1986; Zebrowitz, Andreoletti, Collins, Lee, & Blumenthal, 1998). For example, there is evidence that the maturity of facial structure creates a self-fulfilling prophecy whereby mature, dominant-looking people become socially influential (Berry & Landry, 1997; Mueller & Mazur, 1997).

Past studies have tended to focus on direct or overt aggression, which is most relevant for boys (Crick, Bigbee, & Howes, 1996; Werner & Crick, 1999). However, indirect, relational aggressive acts are some of the most commonly employed means of getting one's way (Crick et. al., 1996; Crick, Casas, & Nelson, 2002). Relational aggression relies on more subtle forms of manipulation rather than overt physical or verbal abuse. Crick and Grotpeter (1995) define relational aggression as a form of aggression that utilizes the manipulation of relationships and social inclusion as an attempt to harm others. Overt aggression is easily recognized as aggressive (Crick et. al.,

1996). Crick et al. (1996) assessed children's normative beliefs about both forms of aggression. They found that indirect aggressive acts were viewed as common angry behaviors, especially for girls, and that children view these manipulative acts as intended to harm (i.e. aggressive). In general, relational aggression is most common among adolescent girls whereas direct aggression is most prevalent among adolescent boys (Crick et. al., 1996). These relationally aggressive tactics are particularly important to the study of aggressive interactions among adolescents and young adults.

Aggressive tactics are used by individuals to attain goals. The goal is often social dominance. According to Hawley (1999, p. 105), social dominance is defined as a "differential ability to control resources" such as a desired object or position in the social hierarchy. Until about age five, children use overt aggressive tactics to gain social dominance. These tactics are quite effective; not only are they successful in gaining objects and attention, children who use them are often well liked by their peers (Hawley, 1999). Around age eight these overt aggressions are no longer favorably viewed by the peer group (Hawley, 1999). Thus there is a shift in aggressive strategies whereby both boys and girls use relationally aggressive acts to achieve dominance (Bjoerkqvist et. al., 1992). This shift is correlated with an increase in social intelligence in adolescence (Kaukiainen, Bjoerkqvist, Oesterman & Lagerspetz, 1996). When ten, twelve and fourteen year olds were asked to assess their peers on social intelligence and indirect aggression, a positive correlation emerged between social intelligence and indirect aggression within each age group (Kaukiainen et. al., 1996). These results suggested that an understanding of others is a necessary prerequisite to the successful development of socially manipulative behaviors (Kaukiainen et. al., 1996).

Social manipulation can refer to both relational aggression and to prosocial behavior. For example, prosocial behavior consists of activities such as cooperation and helpfulness. Prosocial strategies also correlate with an increase in social intelligence because they require the ability of perspective taking, or recognizing the thoughts and feelings of others (Hawley, 1999). In addition, prosocial strategies are promoted by parental attitudes, rearing styles and disciplinary actions (Hawley, 1999). According to Hawley (1999), it is due to these different factors that certain individuals continue to use more overt aggressive acts whereas others begin to employ more prosocial strategies. Those who continue to use coercive methods to get their way become bullies and those who use prosocial methods to manipulate peers become leaders. But what factors might lead some children to bully and others to lead?

The way an individual looks may partly determine his or her niche in the social hierarchy by influencing the means employed to secure that position. It is widely recognized that perceptions of personality are based on facial appearance (Berry & Finch Wero, 1993; Berry & Landry, 1997; Keating, 1985; Zebrowitz-McArthur & Apatow, 1984). Further, Zebrowitz-McArthur and Apatow (1984) found that individuals who were rated similarly on physiognomic features were also rated similarly on personality suggesting that certain features imply specific personality traits. For example, individuals with dominant facial features are viewed as strong, independent, and dishonest (Keating & Doyle, 2002). Baby faced individuals are identified as more socially dependent, intellectually naïve, physically weak, honest and warm than mature faced individuals (Berry & Zebrowitz-McArthur, 1988; Keating, 1985; McArthur & Apatow, 1984). Attractive individuals are viewed as more dominant, competent and

intelligent than less attractive people (Adams, 1977; Eagly, Ashmore, Makhojani & Longo, 1991; Feingold, 1992). The expectations generated by facial appearances may be subsequently influenced through social interaction and become a determining factor for an individual's position in the social realm.

Facial characteristics and the social perceptions they create have a powerful impact on the development of an individual's personality. Through social interactions, appearance acts as a mediator for the development of certain traits. This is referred to as the self-fulfilling prophecy effect of facial structure (Adams, 1977; Bond, Berry, & Omar, 1994; Langlois, 1986). Social expectations often set the stage for subsequent behavior and the development of traits. A study conducted by Bond et. al. (1994) found that individuals who appear dishonest were more willing to engage in deception than individuals who were thought to look honest. It is possible that honest looking people are trusted with secrets more than dishonest looking people and so are less willing to violate that trust, thus creating a positive relationship between appearance and subsequent behavior, and lending evidence for self-fulfilling prophecy effects (Bond et. al., 1994).

Evidence also supports the self-fulfilling prophecy theory for attractive and baby-faced people. For example, attractive individuals are treated more positively, are asked on more dates and are preferred as mates. In general, they are given preferential treatment in the job market (Collins & Zebrowitz, 1995; Langlois, 1986) and criminal justice system (Berry & Zebrowitz-McArthur, 1988; Zebrowitz & McDonald, 1991). Attractiveness thus elicits social influence through interpersonal interactions. In contrast, Zebrowitz, Collins, & Dutta (1998) found evidence indicating that baby-faced adolescent boys would compensate for submissive expectations by acting contrary to them. Specifically, while these boys were expected to be unintelligent they instead demonstrated high academic achievement. They also exhibited delinquent behavior more frequently than mature faced boys of the same age (Zebrowitz et. al., 1998). Although this finding is an indication of how certain individuals may respond to expectations, further research supports the self-fulfilling prophecy theory. For example, baby-faced people are preferred as dates by dominant individuals, creating a situation where they assume a submissive role based on their appearance alone (Hadden & Brownlow, 1991, as cited in Zebrowitz et. al., 1998). Baby-faced individuals are often offered employment positions where requirements are traits associated with baby-face stereotypes. Zebrowitz, Tenenbaum, and Goldstein (1991) found that when applying for jobs, individuals who were female or baby-faced were preferred in employment positions requiring warmth and submission. Individuals who were mature-faced or male were given preferential treatment when applying for jobs requiring shrewdness or leadership. Further research indicates that baby-faced individuals are treated differently than their mature-faced peers as early as childhood. Research conducted by Zebrowitz, Kendall-Tackett and Fafel (1991) and Zebrowitz, Brownlow and Olsen (1992) found that baby-faced children are generally treated as less competent and therefore given easier assignments and chores than their mature-faced counterparts and are also given less severe punishments by their parents. Thus, self-fulfilling prophecy wields powerful effects through social perception of facial appearance.

In the present study, seventh and eleventh grade classes, and undergraduate students were asked to fill out peer nomination forms to evaluate peers on sociometric and social strategy variables: dominance, popularity, relational aggression, and prosocial

behavior. The undergraduate students were members of a sorority. Sorority members were chosen because they live together, have formed some type of bond, and are aware of each other's social styles that other non-Greek affiliates may not be exposed to (Werner & Crick, 1999). Each student was asked to nominate up to five peers, by number, for each of the social traits. Peer evaluations have proven to be an effective means of gathering social information within a peer group, and especially information about relational aggression (Crick et. al., 1996; Crick & Grotpeter, 1995; Lease, Kennedy, & Axelrod, 2002; Werner & Crick, 1999). The sixteen items used to measure relational aggression and prosocial behaviors were obtained from the scale used by Werner and Crick (1999). The seven items used to measure dominance were obtained from Weisfeld, Bloch & Ivers (1984). To measure popularity, participants were also asked to nominate the students that they like to spend the least or most amount of time with (Pellegrini & Bartini, 2001; Salmivalli, Kaukiainen & Lagerspetz, 2000). In addition, they nominated individuals who were popular among their peers. A separate group of undergraduate participants were asked to rate photographs of the participants for dominance, attractiveness, and maturity.

Doyle (2002) suggested that individuals who use relational aggression combined with prosocial behaviors would be dominant. Salmivalli et. al. (2000) propose that these individuals will also be popular. In support of these propositions, it has been found that popular children tend to be socially sophisticated, using their social intelligence to manipulate and control others, exclude certain people from the social group to form social boundaries, and maintain their high position in the social hierarchy (Adler & Adler, 1998).

The purpose of this study was to find a relationship among sociometric status, relational aggression, and facial structure. We hoped to find a link between these social personality traits with dominance and babyishness facial characteristics. Specifically, we expected to find a positive correlation between relational aggression and dominance for both males and females (Doyle, 2002). We also expected that individuals with dominant and mature looking faces would be nominated by peers as being more socially dominant and individuals with less dominant and babyish faces will be nominated by peers as being more socially submissive. Attractiveness was used to control for assessments of dominant behavior to individuals with babyish faces. Scores were differentiated by gender, as we predict there will be differences in social behavior as they relate to facial ratings.

Methods

Participants

Participants were 50 seventh grade students (15 boys and 35 girls), 60 eleventh grade students (23 boys and 37 girls), and 35 undergraduate college students (35 members of a sorority). The seventh and eleventh grade participants were from a suburban public school in eastern Massachusetts; the college students were from a small liberal arts university in upstate New York. Parental consent forms were obtained for the seventh and eleventh grade participants. College students signed a consent form before participation and received a certificate for a slice of pizza in return. In addition, 46 undergraduates (21 males and 25 females), at the same university, were asked to rate a

series of faces on a computer. Participants consisted of undergraduates recruited by the experimenters. Participants signed a consent form before participation and received a certificate for a slice of pizza in return for their participation.

Procedure

Peer Evaluation

Participants were given a peer nomination questionnaire that consisted of 26 items (Appendix A). Each participant was assigned a number and given a list of all participants' names and assigned numbers within their respective group, either a grade school class or Greek organization. Identifying their peers by the designated number, they answered a questionnaire concerning the dominance, popularity, relational aggression and prosocial behavior of their peers. The grade school participants completed the questionnaire in their classroom and sorority members completed it in their rooms at the Greek house. Participants were encouraged to work quietly and not look at or talk about others' responses.

Participants were asked to provide the designated numbers of five peers that frequently exhibited the behavior described in each item. They were also asked to identify the ten students that they liked to spend the most time with and ten students that they liked to spend the least amount of time with, to determine popularity. Popularity was also measured by asking participants to note the numbers of five people who are popular among their peers. The seven questions concerning dominance were obtained from the peer ranking questions used in Weisfeld et. al.'s (1984) study on social dominance among adolescent girls. The sixteen questions assessing relational aggression and prosocial behavior were attained from Werner and Crick's (1999) study of relational aggression and social psychological adjustment in a college sample (Weisfeld, et. al., 1984; Werner & Crick, 1999).

Scoring methods were obtained from Doyle's (2002) study of relational aggression, prosocial behavior, and influence. Overall scores for dominance, popularity, relational aggression, and prosocial behavior were calculated for each gender. Each time a student was nominated for a specific characteristic a point was given to his/her overall score in that category. Scores were differentiated by both the gender of the student nominator and of the student nominee.

Face Rating

Participants were seated in front of a computer in a small lab room or in a secluded area of an apartment. They were presented with a series of randomized photographs of either seventh graders, eleventh graders or undergraduates. Each photograph appeared for four seconds. They rated the faces for dominance, attractiveness and maturity on a seven point Likert scale (Appendix B).

An average score for each face was calculated for each category: dominance, attractiveness, and maturity. These scores were then compared to peer nomination reports of each participant whose face was rated to determine correlation scores between facial traits and personality attributes related to dominance, popularity, relational aggression, and prosocial behavior.

Results

Correlations were found for each age group. Each grade was also broken down by gender of respondent and correlations were calculated for each of these subgroups.

Seventh Grade Participants

Seventh graders that were rated as dominant looking were rated by their peers as acting dominant (Table 1).

Ancillary Results

Attractiveness was positively correlated with prosocial behavior. A dominant face was negatively correlated with a baby face. Dominant behaviors were positively correlated with prosocial behaviors and popularity. Popularity was also positively correlated with relational aggression and prosocial behaviors (Table 1).

Seventh Grade Females

The girls that were rated as looking more dominant also acted more dominantly with their peers. Those that were rated as relationally aggressive were reported to be dominant in their actions (Table 2).

Ancillary Results

Prosocial behavior was positively associated with a dominant appearance (Table 2).

Eleventh Grade Participants

Table 3 represents the eleventh grade results. Dominant behaviors were positively correlated with relational aggression. No gender differences were found regarding our predictions.

Ancillary Results

For eleventh graders, attractiveness was positively correlated with popularity, prosocial and dominant behaviors, but negatively correlated with having a baby face. A dominant face was negatively correlated with a baby face. Dominant behaviors were positively correlated with prosocial behaviors and popularity. Popularity was also positively correlated with relational aggression and prosocial behaviors (Table 3).

Eleventh Grade Males – Ancillary Results

Results for eleventh grade boys indicated that attractiveness was positively correlated with prosocial and dominant behaviors, yet negatively correlated with a baby face (Table 4).

Eleventh Grade Females – Ancillary Results

When solely examining the eleventh grade sample of girls, attractiveness was positively correlated with dominant and prosocial behaviors (Table 5).

College Participants

Data was collected but not analyzed due to time constraints.

Discussion

Findings partially supported our predictions. As predicted a positive correlation was found between relational aggression and dominant behavior among seventh and eleventh grade students. Upon controlling for gender, the correlation only emerged among seventh grade girls. Consistent with Hawley's (1999) theory, girls rely on relational aggression more often than boys. However, contrary to the developmental model proposed by Hawley (1999), neither gender differences nor significant correlations within each gender were found among the eleventh grade sample. Although not significant, the eleventh grade girls' sample displayed a stronger relationship than did the eleventh grade boys' sample, thus a larger sample may elicit significant results.

Dominant looking faces were positively correlated with dominant behavior, thus providing further evidence for the self-fulfilling prophecy effect (Adams, 1977; Bond, et. al., 1994; Langlois, 1986). These results were found in the seventh grade sample, specifically seventh grade girls. This gender difference may be due to the earlier pubertal timing of females than males; therefore males may not have received high dominance ratings because their faces were relatively babyish. There were no significant findings for the eleventh grade sample. Perhaps these null results occurred because in seventh grade dominant looking individuals would stand out next to their baby-faced peers, but by eleventh grade more individuals have facially matured, thus appearing more dominant overall.

There was no evidence that baby-faced adolescents acted less dominantly than their peers. Although negative correlations were found for most samples, none reached significance. It could be the case that dominant looking people, who tend to act in a dominant manner, generally stand out more than baby-faced individuals. Therefore, when participants rated their peers the more submissive looking and acting individuals did not come to mind as easily as their more dominant peers, thus baby-faced individuals were nominated infrequently.

Five significant relationships were found across all samples. Dominant looking individuals were rated low on baby-facedness, indicating validity with the measure. Popularity was positively related to relational aggression and to prosocial behavior, lending support to Salmivalli and colleagues' (2000) proposition. Furthermore, in accordance with Doyle (2002), popularity was positively related to dominant behavior. Consistent with Hawley's (1999) model and idea of "coercive strategies", dominant behavior was positively related to prosocial behavior. Dominant individuals may be inclined to maintain their dominant status and will therefore employ the most effective strategy. At times, the most effective strategy may be prosocial behavior. Non-dominant people may be less successful in employing various tactics, solely relying on aggressive strategies. As Adler and Adler (1998) suggested, perhaps dominant behaving individuals are more socially sophisticated than their submissive peers, enabling them to choose when either relational aggression or prosocial behavior is most appropriate to attain a given goal.

While used as a control, attractiveness was significantly correlated with several variables, particularly for the eleventh grade sample. Baby-faced individuals were rated as less attractive than more mature faced individuals. Attractive individuals were also

rated as more popular, prosocial, and dominant acting by their peers. Regardless of actual beauty, dominant and popular individuals may be perceived as more attractive because of the social context. This effect can be bi-directional, in that attractive people can draw others into a relationship, thereby appearing more dominant and popular (Keating, 2002)

Consistent with Bjoerkqvist et. al. (1992), we found that dominant individuals employ relationally aggressive strategies to obtain their goals. Again, dominant individuals may have an increased social intelligence, enabling them to discern when to employ relational aggression versus prosocial behavior as manipulative tactics (Adler & Adler, 1998). In addition, peers recognized dominant looking individuals as behaving prosocially. A relationship was found between dominant behavior and a dominant appearance, therefore showing a link between a dominant appearance and prosocial behavior.

Implications

Appearance is a powerful mediator in social interactions as it is the first observed visible characteristic. Our seventh grade sample associated a dominant appearance with dominant behaving individuals. This finding is evidence in support of the self-fulfilling prophecy effect, which carries strong implications in the development of individuals' behaviors. This link was not found among our eleventh grade sample suggesting that younger adolescents tend to rely more heavily on appearance as a way of evaluating their peers. Appearing dominant is thus a more salient factor in determining interactions among seventh graders than it is among eleventh graders.

While a dominant appearance had a strong effect for the seventh grade sample, attractiveness proved more influential in the eleventh grade sample. Attractive individuals are rated as more popular, prosocial, and dominant by their peers. Less attractive eleventh graders may find it difficult to exert social influence as they are not able to garner the respect that attractive individuals are. The inability of unattractive adolescents to attain popularity through behavior could have negative ramifications on their social development and self-esteem.

Regardless of a dominant individual's appearance, he or she is more likely to utilize relational aggression than his or her submissive acting peers. Although relational aggression may not be an appropriate behavior, it is effective. Dominant individuals are successful in attaining their goals, oftentimes through relational aggression, therefore reinforcing the behavior. This is cause for concern, taking into account the principles of operant conditioning. Caregivers and educators should try to combat relational aggression by encouraging more positive peer interactions.

Frequently, the goal of dominance, relational aggression, and prosocial behavior is popularity. Indeed there is a link between popularity and these behavioral tactics, illustrating two means of attaining popularity. Dominant and relationally aggressive individuals in effect attain popular status through control rather than through more socially acceptable means, thus creating a social hierarchy, which could be the root of many difficulties during adolescence including low self-esteem. Alternatively, individuals who employ prosocial tactics attain popularity in a way that ensures healthier social interactions and a less rigid social hierarchy because this type of popularity is based on friendship rather than fear or subordination.

Limitations

College students, in particular males, may have found it awkward to rate seventh and eleventh graders on traits such as attractiveness and dominance. This study may have been improved if children of the same age group rated the photographs rather than college students. Therefore using same age raters would result in more accurate evaluations of appearance.

In addition, the peer nomination forms may have been biased. As previously stated, peers may recall dominant individuals more easily than submissive peers. Therefore, dominant individuals may have been nominated more often than submissive peers for all categories.

Although significance was not found between baby-faced individuals and dominant behavior, our results indicated the expected negative relationship. Significance may have been reached for more variables if our sample size had been larger.

Conclusion

The present findings reveal that appearance is an influential factor in determining behavior through social interaction and thus an adolescent's place in the social hierarchy. The results were quite strong, indicating the importance of this area of study.

Our findings demonstrate that future research in this area should focus on attractiveness, as it relates strongly to both dominance and popularity. All of these variables work in unison to determine people's behaviors and how they are perceived by others. Studying an older sample, such as college students, may be helpful in understanding the developmental process of goal attainment through relational aggression and prosocial behavior.

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Table 1

Correlations Between Ratings of Dominant Appearance, Baby Facedness, Attractiveness, Prosocial Behavior, Relational Aggression, Popularity and Dominant behaviors for Seventh Grade Participants

	Dom. Appear.	Baby Faced	Attractive	Prosocial Behaviors	Relational Aggression	Popularity	Dominant Behaviors
Dom. Appear.	.309*						
Baby Faced	-.458**						
Attractive							
Prosocial Behavior			.349*			.534***	.681***
Relational Aggression						.496***	
Popularity							.830***
Dominant Behaviors							

Note: Tests were two-tailed. Bold indicates predicted results.

*p<.05

**p<.01

***p<.001

Table 2

Correlations Between Ratings of Dominant Appearance, Attractiveness, Prosocial Behavior, Relational Aggression, Popularity and Dominant behaviors for Seventh Grade Female Participants

	Dom. Appear.	Prosocial Behaviors	Relational Aggression	Dominant Behaviors
Dom. Appear.				.463*
Prosocial Behavior	.383*			
Relational Aggression				.551**
Dominant Behaviors				

Note: Tests were two-tailed. Bold indicates predicted results.

* $p < .05$

** $p < .01$

Table 3

Correlations Between Ratings of Dominant Appearance, Baby Facedness, Attractiveness, Prosocial Behavior, Relational Aggression, Popularity and Dominant behaviors for Eleventh Grade Participants

	Dom. Appear.	Baby Faced	Attractive	Prosocial Behaviors	Relational Aggression	Popularity	Dominant Behaviors
Dom. Appear.		-.666***					
Baby Faced							
Attractive		-.323*		.409**		.390**	.415**
Prosocial Behavior						.591***	
Relational Aggression						.459***	
Popularity							
Dominant Behaviors				.805***	.329**	.793***	

Note: Tests were two-tailed. Bold indicates predicted results.

*p<.05

**p<.01

***p<.001

Table 4

*Correlations Between Ratings of Attractiveness, Baby-Facedness, Prosocial Behavior
and Dominant Behaviors for Eleventh Grade Males*

	Baby Face	Prosocial Behaviors	Dominant Behaviors
Attractive	-.787**	.553*	.546*

Note: Tests were two-tailed.

* $p < .05$

** $p < .01$

*** $p < .001$

Table 5

Correlations Between Ratings of Attractiveness, Prosocial Behavior and Dominant Behaviors for Eleventh Grade Females

	Prosocial Behaviors	Dominant Behaviors
Attractive	.553*	.546*

Note: Tests were two-tailed.

* $p < .05$

Appendix A

Participant #: _____

Age: _____ Sex: _____

Before you start, please find the number that corresponds with your own name. Write this number at the top of the survey where it says participant #: _____. Next, cross your name off of the list as a reminder that you can't nominate yourself for any of the questions on the survey. Find a spot where you will be able to fill out your survey privately.

Below are descriptions of social behavior. For each description, please choose five individuals from your list who best fit each description. Using the group roster, write the ID number of each individual in the lines provided after each item. You cannot nominate yourself – do not use your own number for any answer! If you cannot think of five people who fit a particular description, fill in only as many ID numbers as there are individuals who fit the description. Remember that your answers are confidential!

1. Find the numbers of 5 people who are good leaders.

2. Find the numbers of 5 people who are most likely to win in an argument.

3. Find the numbers of 5 people who make it clear to their friends that they will think less of them unless the friends do what they want.

4. Find the numbers of 5 people who are relaxed.

5. Find the numbers of 5 people who try to damage the reputation of people they are mad at by passing on negative information about them to others.

6. Find the numbers of 5 people who make sure that other people get invited to participate in group activities.

7. Find the numbers of 5 people who are often “in charge”.

8. Find the numbers of 5 people who often tell others what to do.

9. Find the numbers of 5 people who, when they are not invited to do something with a group of people, will retaliate by excluding those people from future activities.

10. Find the numbers of 5 people who are very dependable – they follow through with their promises and commitments.

11. Find the numbers of 5 people who are willing to give advice when asked for it.

12. Find the numbers of 5 people who make eye contact when speaking to others.

13. Find the numbers of 5 people who are generally kind to other people.

14. Find the numbers of 5 people who exclude others from activities when he/she is angry with them.

15. Find the numbers of 5 people who are good listeners when someone has a problem to deal with.

16. Find the numbers of 5 people who act “cold” or indifferent towards others until they get their own way.

17. Find the numbers of 5 people who are popular among their peers.

18. Find the numbers of 5 people who intentionally ignore other people until they agree to do something for them (e.g. loaning them CD’s, clothing, etc.) or to give them something they want (e.g. money, tickets to a game or show).

19. Find the numbers of 5 people who make an effort to include other people in their conversations.

20. Find the numbers of 5 people who threaten to share private information about their friends with other people in order to get them to comply with their wishes.

21. Find the numbers of 5 people who make others feel welcome.

22. Find the numbers of 5 people who are influential among their peers.

23. Find the numbers of 5 people who, when angered or provoked by another person, react by ignoring that person or giving them the “silent treatment”.

24. Find the numbers of 5 people who are self-confident.

25. Find the numbers of 5 people who are usually willing to lend their belongings (CD’s, clothes, etc.) to other people.

List the numbers of the people you like to spend the least time with. Below are spaces for 10 numbers, but please list as many or as few people as you like.

List the numbers of the people you like to spend the most time with. Once again, list as many or as few numbers as you like.

Appendix B

How babyish or mature in structure is this face?

- a. extremely mature-faced
- b. very mature-faced
- c. slightly mature-faced
- d. neither
- e. slightly baby-faced
- f. very baby-faced
- g. extremely baby-faced

How physically attractive or unattractive is this face?

- a. extremely unattractive
- b. very unattractive
- c. slightly unattractive
- d. neither
- e. slightly attractive
- f. very attractive
- g. extremely attractive

How dominant or submissive-looking is this face?

- a. extremely dominant
- b. very dominant
- c. slightly dominant
- d. neither
- e. slightly submissive
- f. very submissive
- g. extremely submissive

