

Sex Differences in Covert Aggression Among Adults

Kaj Björkqvist, Karin Österman, and Kirsti M.J. Lagerspetz

*Department of Social Sciences, Åbo Akademi University, Vasa, Finland (K.B., K.Ö.)
Turku University, Turku, Finland (K.M.J.L.)*

.....

In previous studies [Aggressive Behavior 14:403-414, 1988; Aggressive Behavior 18:117-127, 1992] it was found that adolescent girls used indirect means of aggression more than adolescent boys, whereas physical aggression was used more by boys, and direct verbal aggression was used equally by both sexes. The present study investigated whether males, as adults, start to employ indirect aggression to the same extent as females. Three hundred thirty-three university employees (162 males, 176 females) filled in the Work Harassment Scale by Björkqvist et al. [1994]. Special attention was drawn to two subscales: rational-appearing aggression and social manipulation. It was found that males used the former type of aggression significantly more often than females, while females used the latter more than males. Both are variants of covert aggression, in which the perpetrator tries to disguise his/her aggressive intentions, in order to avoid retaliation and/or social condemnation. © 1994 Wiley-Liss, Inc.

.....

Key words: sex differences, covert aggression, indirect aggression, physical aggression, verbal aggression

INTRODUCTION

Aggressive behavior has many faces and forms. Aggressive styles are also subject to developmental change during the life course. Among animals and young children lacking verbal skills, aggression is predominantly physical. Verbal skills, when they develop, are utilized not only for peaceful communication, but also for aggressive purposes. When social skills develop, even more sophisticated strategies of aggression are facilitated with the aggressor able to harm a target person without even being identified: These may be referred to as indirect aggression [Lagerspetz et al., 1988]. In Björkqvist et al. [1992a], and Björkqvist et al. [1992b], a developmental theory was presented according to which aggressive behavior tends to appear in the above mentioned order:

Received for publication December, 10, 1992; accepted June 11, 1993.

Address reprint requests to Kaj Björkqvist, Department of Social Sciences, Åbo Akademi University, SF-65100, Vasa, Finland.

1) direct physical, 2) direct verbal, and 3) indirect aggression. Indirect aggression becomes prevalent among girls at about the age of 11, although the use of indirect strategies may be discerned already among younger children. Indirect aggression is used significantly more by females than by males [Feshbach, 1969; Lagerspetz et al., 1988]. In the latter, indirect aggression was defined as 'social manipulation,' attacking a target person not directly, but circuitously, thereby remaining unidentified and avoiding counterattack (e.g. manipulating others to attack an opponent, excluding an individual from the social group, spreading malicious rumors, etc.).

Sex differences in regard to aggressive styles appear during all stages of life: childhood, adolescence, and adulthood. The claim that human males are more aggressive than females [e.g., Maccoby and Jacklin, 1974] appears, however, to be false, and a consequence of narrow definitions and operationalizations of aggression in previous research, with a predominant emphasis on physical aggression. Recent reviews find fewer sex differences with respect to aggression, and these are more of qualitative than quantitative nature. Frodi et al. [1977] describe how male and female aggression varies situationally. Eagly and Steffen [1986] conclude, as a result of their meta-analysis of experimental studies of adult (over 24 years of age) aggression, that men were somewhat more likely than women to engage in aggression, although the sex difference in the male direction was larger for physical than psychological aggression. Another meta-analysis by Hyde [1984] concludes that only 5% of the variation in aggression scores is explained by sex differences, with 95% explained by within-gender variation or by chance. In their review, Björkqvist and Niemelä [1992] suggest that the question whether males are more aggressive than females is, in reality, meaningless without specification. It all depends on type of encounter (male-male, male-female, female-female), type of aggression (physical, verbal, or indirect), and situation (in primary groups, i.e., in the home; in secondary groups, such as in school or at work; or between groups, as in warfare). Individuals are usually more hostile towards members of the same sex, while males tend to be chivalric towards (at least unknown) females [Maccoby and Jacklin, 1974; Frodi et al., 1977; Eagly and Steffen, 1986]. As Björkqvist and Niemelä [1992] point out, the operationalizations of aggressive behavior mostly favored in research, of children as well as adults, are likely to exaggerate sex differences. Child subjects have often been observed in school yards or day-care centers [as is the case in the majority of studies reviewed by Maccoby and Jacklin, 1974, and Hyde, 1984]. The easiest observable type of aggression is physical. Direct verbal aggression may be observed, too, while indirect aggression has to be measured by other means, such as peer ratings [for a discussion on methodology, see Björkqvist et al., 1992a].

Two important questions arise: Why do aggressive strategies change during the life course, and why do sex differences occur? In the following, the concept of the *effect/danger ratio* is presented. With the help of this ratio, variation with respect to aggressive style preference may partly be understood, regardless of whether the variation is related to gender or age. In an individual's life, the cost/benefit ratio of aggression is likely to be improved by using strategies that become available during development, and the effect/danger ratio is a useful example of it. The effect/danger ratio is an expression of the subjective estimation of the likely consequences of an aggressive act. The aggressor assesses the relation between a) the effect of the intended strategy, and b) the dangers involved, physical, psychological or social, for him/herself, and for people important to him/her. The objective is to find a technique that will be effective and,

at the same time, incur as little danger as possible. The aggressor tries to maximize the effect, and to minimize the risks involved. For example, physical aggression is effective but also risky, and if unsuccessful, the aggressor is likely to get hurt him/herself.

The effect/danger ratio facilitates the understanding of both sex differences and developmental stages in regard to aggressive style. The ratio can, in fact, be applied to a wide variety of circumstances and personal differences. Females, physically weaker than males, tend to resort to verbal and, especially, indirect means of aggression, rather than to physical means. They use physical violence only when absolutely necessary. Physical aggression is also dangerous for adult males: Socially, there is the risk of condemnation; physically, there is the risk of injury. In Björkqvist et al. [1992a], it was shown that the level of physical aggression decreases drastically during adolescence, even among males, to be replaced mainly by verbal, but also indirect means of aggression. The more able the aggressor is at staying out of the reach of the opponent, and at assessing the opponent's retaliation resources, the better (s)he will be at avoiding counterattack and minimizing risks. Indirect aggression can be highly effective and, if successful, the aggressor will remain unidentified.

Sex differences and the developmental course described above are also naturally affected by the social norms of the society in question [Burbank, 1987; Björkqvist and Niemelä, 1992; Cook, 1992; Fry, 1988, 1990, 1992; Glazer, 1992; Kuschel, 1988, 1992]. A certain amount of physical aggression is usually considered acceptable among young boys but not among girls [there are exceptions, e.g., Cook, 1992]. Physical aggression among adult middle class European and North American males is acceptable only in self defense or defense of others [Holm, 1983].

As a theoretical standpoint for the present study, it is suggested that hostility (or aggression, insofar as the motivation to cause harm is included in its definition, as suggested by Feshbach [1970] and Björkqvist and Niemelä [1992] does not diminish with age. Adults are not less hostile than adolescents or young children, but they use other, more covert, means of aggression. Similarly, it is suggested that females are not necessarily less aggressive than males, but, due to considerations based on the effect/danger ratio, they tend to use different strategies.

The present study is a continuation of previous work initiated by our research group on sex differences with respect to direct and indirect aggression. The purpose of the study was to investigate sex differences in aggressive styles among adults in everyday life, namely, at their place of work. This choice of environment seemed the logical one since the aim was to investigate patterns of aggressive behavior among groups of adults interacting in everyday life, as children do at school. Previous studies, in which adolescents served as subjects, were conducted in school surroundings. The object was to find out whether later in life, males "catch up" on females with regard to level of indirect aggression, or whether they develop their own gender-typical style of covert aggression. This enterprise was conducted within the framework of a larger project investigating work harassment. Work harassment is a serious problem, severely affecting the lives of those who are exposed to it. In Sweden, a country with 9 million inhabitants, it is estimated that 100–300 people commit suicide yearly as a result of harassment by colleagues. Every 6th to 8th suicide is directly related to work harassment [Leymann, 1986]. Work harassment is thus a form of interpersonal aggression, which is at least as harmful as violence in the traditional sense. Details of the work harassment project will be published in another article. The results regarding sex differences with respect to styles of aggressive behavior are presented here.

MATERIALS AND METHODS

Subjects

Seven hundred twenty-six employees (401 males, 325 females) of Åbo Akademi University (all the employees who could be reached in the Turku branch of this university which caters to the Swedish speaking population of Finland), served as subjects. Three hundred thirty-eight, or 47% (46% of the males, and 54% of the females) returned the questionnaire. This response rate is normal in investigations of aggressive behavior and harassment at work places, in view of the sensitive questions that are asked [Leymann, 1986]. A response rate of 47% does not seem to affect the validity of the results: In another study on work harassment, [Einarsen and Raknes, 1991] an attempt was made to reach those who did not fill in the questionnaire the first time round. When the new information was added and analysed, it did not significantly affect the findings.

Thirty-four percent of the subjects were 21–30 years of age, 31% 31–40, 26% 41–50, and 9% were more than 50 years of age. With respect to age, there was no significant difference between males and females.

Measurement of Covert Aggression

A factor analysis of the *Work Harassment Scale* by Björkqvist, Österman and Hjelt-Bäck [1992], led to the elaboration of two subscales of covert, or disguised, aggression. These are referred to as rational-appearing aggression and social manipulation. Subjects were required to assess to the extent to which they had been victims of various types of aggressive behavior. The assessments were made on a five point scale ranging from 0 to 4 ('never' to 'very often'). They also indicated whether the aggressor(s) had been male or female.

The scale of rational-appearing aggression ($\alpha = .70$) consisted of five items, describing the following types of behavior: "reduced opportunities to express oneself," "being interrupted," "having one's work judged in an unjust manner," "being criticized," "one's sense of judgment being questioned." (It should be noted that it was explicitly stated in the instructions that these should be acts of aggression, with the intention of deliberately hurting and causing psychological pain to the victim of these acts. They were part of a larger scale, investigating strategies of work harassment. Interruption and criticism may, in other circumstances, be part of perfectly normal communication. When used systematically as a means of harassment, they may be highly aggressive acts.) The scale of social manipulation ($\alpha = .82$) consisted of the following seven items: "insulting comments about one's private life," "insinuating negative glances," "backbiting," "spreading of false rumors," "insinuations without direct accusation," "not being spoken to," "do-not-speak-to-me' behavior."

RESULTS

A MANOVA was conducted, with the two styles of covert aggression (rational-appearing aggression and social manipulation) as dependent variables, and sex of aggressor and sex of victim as independent variables. According to the multivariate analysis, there was no significant effect for sex of victim ($F(2,151) = .59$, n.s.). Males and females reported similar rates of exposure to both kinds of covert aggression. There was, however, a significant difference with respect to sex of aggressor (multivariate

$F(2, 151) = 9.78, P < .001$). According to the univariate analyses, each sex had a preferred style of covert aggression. Males used rational-appearing aggression more than females ($F(1, 152) = 4.34, P < .05$), while females used social manipulation more often than males ($F(1, 152) = 6.84, P < .001$, see Fig. 1). Overall, rational-appearing aggression was used more than social manipulation, regardless of sex [t-test, pairs, $t(170) = 8.19, P < .001$, see also Fig. 1]. There was a positive correlation (.39, $P < .01$) between rational-appearing aggression and social manipulation. This fact indicates that individuals have a habitual level of covert aggression, using both styles, but in a selective way, preferring one from the other. There was a significant positive correlation between size of work group and use of social manipulation ($r = .20, P < .05$): the

Styles of aggression

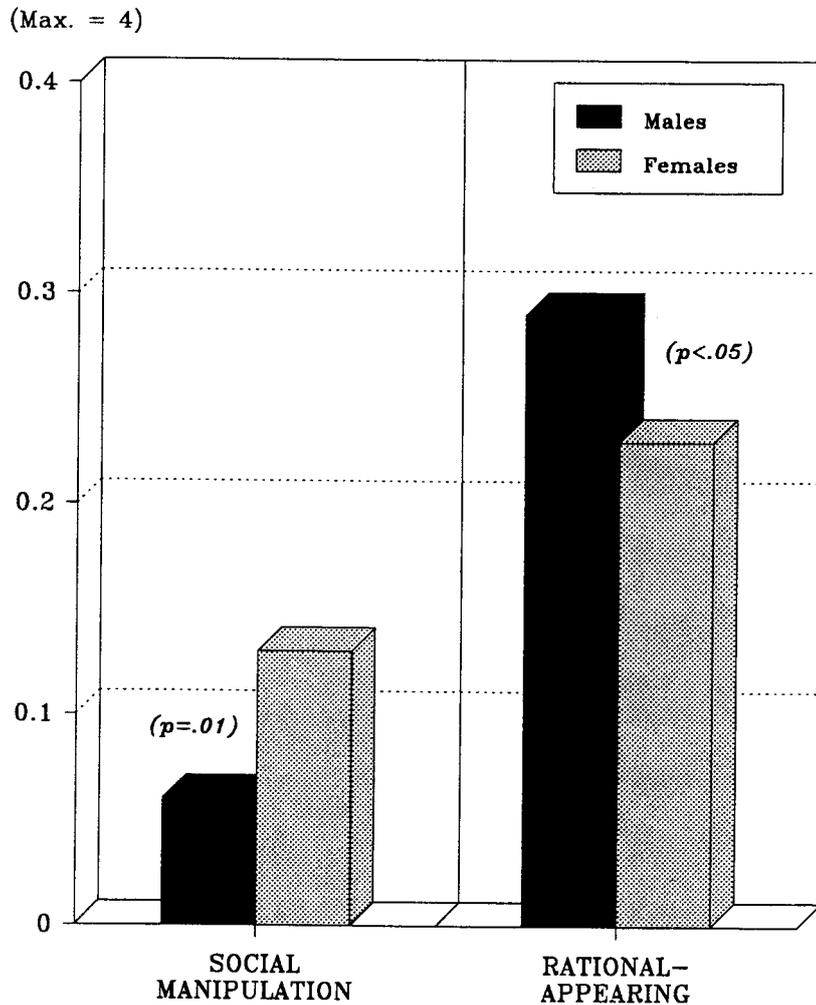


Fig. 1. Two types of covert aggression in adults.

larger the group, the more prevalent social manipulation. However, there was no correlation between group size and rational-appearing aggression.

DISCUSSION

Previous studies have indicated that girls aged 11–18 use indirect aggression, defined as social manipulation, more than adolescent boys [Lagerspetz et al., 1988; Björkqvist et al., 1992a; Björkqvist et al., 1992b]. The purpose of the present study was to investigate whether later in life, males start to use indirect means of aggression to the same extent as females, or whether they develop their own gender specific types of covert aggression. The results show that males do, indeed, use rational-appearing aggression more than females who, during adult life, continue to turn to social manipulation more often than males.

The most preferred style, among the sexes, is rational-appearing aggression. It seems that adults try to conceal their interpersonal aggression as much as possible in behavior which is ostensibly rational and seems to contain "no aggression at all." Nevertheless, the victim may still get seriously hurt in psychological terms. Social manipulation (gossiping and the like) is more easily recognized as aggression, and is, therefore, a less preferred technique. By using seemingly rational arguments, the perpetrator manages to camouflage his/her hostile intentions, and danger, in terms of social condemnation, is reduced. In terms of the effect/danger ratio, the chances of reaching the intended effect by means of rational-appearing aggression are relatively good, while the exposure to danger is small.

In the present study, both styles (rational-appearing aggression and social manipulation) are categorized as two forms of covert aggression since the perpetrator, in both cases, tries to conceal or disguise his/her aggressive intentions in order to reduce danger in terms of retaliation and/or social condemnation. In previous studies, social manipulation was defined as indirect aggression. Rational-appearing aggression can certainly be referred to as indirect aggression as well but the term covert aggression is preferred in order to reserve the usage of indirect aggression to describe behaviors in which the perpetrator manipulates others to attack or harm the target person, instead of doing so him/herself. Rational-appearing aggression may be direct as well as indirect, but it assumes the form of rationality.

The present study indicates that human aggression, especially among adults, can assume a variety of forms, not easily conceivable in subhuman species. There are exceptions: Female chimpanzees and gorillas have been observed using indirect means of aggression to get even with physically stronger individuals [Holmström, 1992; Noë et al., 1980]. While animals mostly fight physically, and young children include verbal means in their aggressive repertoire, adult humans harm their enemies in much more subtle and sophisticated ways. Indeed, direct physical aggression represents only the tip of the iceberg of adult interpersonal aggression.

REFERENCES

- Björkqvist K, Niemelä P (1992): New trends in the study of female aggression. In Björkqvist K, Niemelä P (eds.): "Of Mice and Women: Aspects of Female Aggression." San Diego; Academic Press, pp 3–16.
- Björkqvist K, Lagerspetz KMJ, Kaukiainen A (1992a):

- Do girls manipulate and boys fight? Developmental trends regarding direct and indirect aggression. *Aggressive Behavior* 18:117-127.
- Björkqvist K, Österman K, Kaukiainen A (1992b): The development of direct and indirect aggressive strategies in males and females. In Björkqvist K, Niemelä P (eds), "Of Mice and Women: Aspects of Female Aggression." San Diego: Academic Press, pp 51-64.
- Björkqvist K, Österman K, Hjelt-Bäck M (1994): Aggression among university employees. *Aggressive Behavior* (in press).
- Burbank VK (1987): Female aggression in cross-cultural perspective. *Behavioral Science Research* 21:70-100.
- Cook K (1992): Matrifocality and female aggression in Margeriteno society. In Björkqvist K, Niemelä P (eds) "Of Mice and Women: Aspects of Female Aggression." San Diego: Academic Press, pp 149-162.
- Eagly AH, Steffen VJ (1986): Gender and aggressive behavior: A meta-analytic review of the social psychological literature. *Psychological Bulletin* 100:309-330.
- Einarsen S, Raknes BI (1991): "Mobning i arbeidslivet. En undersøkelse av forekomst og helsemessige konsekvenser av mobning på norske arbeidsplasser." University of Bergen, Norway: A FAHS report [in Norwegian].
- Feshbach ND (1969): Sex differences in children's modes of aggressive responses towards outsiders. *Merrill-Palmer Quarterly* 15:249-258.
- Feshbach S (1970): Aggression. In Mussen PH (ed.), "Carmichael's Manual of Child Psychology." New York: Wiley.
- Frodi A, Macaulay J, Thome PR (1977): Are women always less aggressive than men? *Psychological Bulletin* 84:634-660.
- Fry DP (1988): Intercommunity differences in aggression among Zapotec children. *Child Development* 59:1008-1019.
- Fry DP (1990): Play aggression among Zapotec children: Implications for the practice hypothesis. *Aggressive Behavior* 16:321-340.
- Fry DP (1992): Female aggression among the Zapotec of Oaxaca, Mexico. In Björkqvist K, Niemelä P (eds), "Of Mice and Women: Aspects of Female Aggression." San Diego: Academic Press, pp 187-199.
- Glazer IM (1992): Interfemale aggression and resource scarcity in a cross-cultural perspective. In Björkqvist K, Niemelä P (eds), "Of Mice and Women: Aspects of Female Aggression." San Diego: Academic Press, pp 163-171.
- Holm O (1983): Four factors affecting perceived aggressiveness. *Journal of Psychology* 114:227-234.
- Holmström R (1992): Female aggression among the great apes: A psychoanalytic perspective. In Björkqvist K, Niemelä P (eds), "Of Mice and Women: Aspects of Female Aggression." San Diego: Academic Press, pp 296-306.
- Hyde JS (1984): How large are gender differences in aggression? A developmental meta-analysis. *Developmental Psychology* 20:722-736.
- Kuschel R (1988): "Vengeance is Their Reply: Blood Feuds and Homicides on Bellona Island." Copenhagen: Dansk Psykologisk Forlag.
- Kuschel R (1992): Women are women and men are men: How Bellonese women get even. In Björkqvist K, Niemelä P (eds), "Of Mice and Women: Aspects of Female Aggression." San Diego: Academic Press, pp 173-185.
- Lagerspetz KMJ, Björkqvist K, Peltonen T (1988): Is indirect aggression typical of females? Gender differences in aggressiveness in 11- to 12-year old children. *Aggressive Behavior* 14:403-414.
- Leymann H (1986): "Vuxenmobning. Om psykiskt våld i arbetslivet." Lund, Sweden: Studentlitteratur. [in Swedish]
- Maccoby EE, Jacklin CN (1974): "The Psychology of Sex Differences." Stanford, CA: Stanford University Press.
- Noë R, de Waal FBM, van Hooff JARAM (1980): Types of dominance in a chimpanzee colony. *Folia Primatologica* 34:90-110.