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Abstract

The present study was conducted to predict bullying roles over a six years time period and across contexts differing in the degree of peer hierarchies. Out of two representative data sets from primary (N = 1525) and secondary school (N = 2958), 282 children (156 boys; 126 girls) were followed up longitudinally. Self reports on bullying experiences and peer reports about social status were assessed by a structured individual interview (in primary school) and by questionnaire given classwise (in secondary school). Risk analyses showed, that only a bully role in primary school yields a risk to be sustained in secondary school. However, victims in primary school classes with a more pronounced degree of hierarchical structuring proved stable in their role while the victim role was unstable from primary school classes with low hierarchical structuring. This interaction did not apply to bully role stability. Differential characteristics of the victim and the bully role in primary school and secondary school settings are discussed.

Keywords: Bullying, stability, social status, primary and secondary school

Zusammenfassung

Die vorliegende Untersuchung wurde durchgeführt, um Bullyingrollen über einen Zeitraum von sechs Jahren und Kontexte, die sich im Ausmaß der sozialen Strukturierung unterschieden, vorherzusagen. Auf der Grundlage von zwei repräsentativen Datensätzen aus der Grundschule (n= 1525) und der weiterführenden Schule (N= 2958) wurden dazu die Daten von 282 Kinder (156 Jungen, 126 Mädchen) längsschnittlich analysiert. Die Selbstberichte über Bullyingerfahrungen und Mitschülerberichte über den sozialen Status der Kinder wurden in der Grundschule durch ein strukturiertes Interview und in der weiterführenden Schule durch klassenweise Fragebogenerhebung erfasst. Riskikoanalysen zeigen, dass nur die Täterrolle in der Grundschule einen Risikofaktor für eine Täterrolle in der weiterführenden Schule darstellt. Eine Opferrolle war hingegen nur dann stabil, wenn die Opfer in Grundschulklassen mit schon ausgeprägten Dominanzstrukturen viktimisiert wurden, während aus Grundschulklassen mit geringer hierarchischer Strukturierung keine stabile Opferrolle vorhersagbar war. Dieses Interaktionmuster gilt nicht für die Stabilität der Täterrollen. Differentielle Charakteristika der Opferrolle und der Täterrolle in der Grundschule und der weiterführenden Schule werden diskutiert.

Schlüsselwörter: Bullying, Stabilität, sozialer Status, Grund- und weiterführende Schule

BULLYING ROLES IN CHANGING CONTEXTS: THE STABILITY OF VICTIM AND BULLY ROLES FROM PRIMARY TO SECONDARY SCHOOL

Bullying, defined as aggressive behavior, repeated and systematically shown by pupils and directed towards a weaker individual in class, occurs at all school grades (Smith, Morita, Olweus, Junger-Tas, & Slee, 1999 b). Dan Olweus (1991), who established bullying among school children as a research area, distinguishes two major roles involved in bullying: The victim role comprises a child being bullied sometimes, once or several times a week over a time period of at least three months. The bully role comprises a child who bullies peers sometimes, once or several times a week on a repeated and systematic basis for at least three months. The role occupied by children who match both descriptions is called the bully/victim role which is often subsumed under the victim role by distinguishing a passive victim from an active victim that also shows aggressive-reactive behavior (Boulton & Underwood, 1992; Olweus, 1993; Schwarz, Dodge, & Coie, 1997).

School classes are typically formed by 20 to 30 children and remain in their composition relatively stable over time. Little is known about what in stable group environments facilitates the occurrence of bullying and, in particular, the maintenance of roles occupied in bullying. The school class context is characterized by a strong social hierarchy. Smith (1994) argues that the most succinct definition of bullying is the systematic - repeated and deliberate - abuse of power, most likely to occur in relatively stable social groups with a clear hierarchy and low supervision as is found in schools, the army or in prisons (Ireland & Archer, 1996). An aggressive individual's search for dominance can be facilitated by a hierarchical structure in that it makes low status individuals visible and easy to get to. For example, Hodges, Boivin, Vitaro and Bukowski (1999) have shown that a low status victim is less likely to receive protection by peers. In the present study, the extent to which hierarchical structuring of the social context sustains bullying is investigated by studying bullying roles across primary and secondary school.

Bullying roles in primary and secondary school

The literature on bullying divides into studies that investigate either primary school *or* secondary school contexts. Studies across primary *and* secondary school contexts are extremely rare and the two studies known to the authors

cover only the narrow transition from late primary school to early secondary school (Paul & Cillessen, in press; Pellegrini & Bartini, 2000). The cross sectional findings differ substantially between primary and secondary school, indicating that the social context appears to be a potential moderator that can explain some of the differences found.

There is good reason to assume that the degree to which a hierarchical peer structure is in place differs between primary and secondary school. For primary school, Krappmann (1999) describes the social context to be mainly formed by dyadic relationships and social interactions characterized by a desperate search to keep symmetry. In this environment children directly counterattack, or tend to escape social relationships that are experienced as unfavorably asymmetric. Such characteristics oppose the formation of a strong hierarchy in class. Pellegrini and Bartini (2000) describe social relationships among boys to be dominance driven in late primary school, which suggests that the basic elements for peer hierarchies are in place by that time - at least among boys. Further, in later childhood and towards adolescents (mid secondary school) there is a sharp developmental increase in the ability of persons to reciprocate behaviors beyond a dyad, leading to the formation of complex peer clusters (Cairns & Cairns, 1991), which are likely to be more hierarchically structured than the less complex dyadic peer clusters in primary school. To the best of our knowledge no empirical data has been published that actually demonstrate differences in peer hierarchies between primary and secondary school and links them to bullying. The present study is designed to close this gap.

In the following we review the literature about the occurrence of bullying by differentiating prevalence and stability of bullying roles within primary and secondary school. Thereafter, we develop hypotheses about the link between peer hierarchies and the stability of bullying roles.

Prevalence of victim and bully roles in primary and secondary school

Prevalence of bullying describes the frequency of individuals in a sample who are bullied by others or actively bully others. For victims prevalence rates decrease from higher levels in primary school (15% to 35%) to lower levels in secondary school (5% to 16%; see Smith, Madsen, & Moody, 1999a for a review). In contrast, prevalence rates for bullies in primary school (7% to 12%, cf. Olweus, 1991; Whitney & Smith, 1993) remain similar in magnitude in secondary school (around 10%, e.g., Olweus, 1991, Whitney & Smith, 1993).

Smith et al. (1999a) investigated the downward trend of victim numbers in detail by analyzing a set of studies across primary to late secondary school. They offer several explanations which mainly pertain to developmental changes of the individual: Younger children, as compared to older children, a) use a more inclusive bullying concept that includes any act of unjustified aggression, b) don't master effective strategies to defend bullying, and c) are less likely to refrain from bullying due to socialization pressure. Considering the first explanation it is unclear why the prevalence rate for bullies however seems to remain stable. The decreasing inclusiveness of bullying concepts over time affects the identification of both, bullies and victims, and should thus result in a decrease of prevalence rates for both roles. Regarding the second explanation a direct relationship between low mastery of defense strategies and the occupation of victim roles has not been directly established, so far. Finally, according to the third explanation of social pressure against overt bullying behavior, the prevalence rates for bullies should also decrease over time, which is unlikely given the available empirical evidence. Smith et al. (1999a) are apparently aware of this latter argument. They note that contrary to what should be expected on the basis of increasing social pressure against overt bullying, the attitude towards bullying becomes more positive with age (Salmivalli, 2001). Lacking suitable longitudinal studies one can only speculate that a substantial number of victims escape further victimization over time while the bully role may remain more stable.

In sum, cross sectional comparisons of prevalence rates direct our attention to the possibility that victim and bully roles evolve differently over time.

Stability of victim and bully roles in primary and secondary school

Stability of bullying describes the consistency with which particular individuals are bullied by others or actively bully others over a longer time period. Because stability is based on reports at two or more consecutive measurements, a stable victim or bully status is more consistent in peer or self perception than a status received only once. Measures of stability can shed light on the etiology of bullying roles because they allow to represent differences in the consistency of roles over longer time periods. However studies on the stability of bullying are rare, in primary school as well as in secondary school.

In primary school, the stability of victim roles is low according to peer-reports (Monks, Smith & Swettenham, 2003) and to self reports (Kochenderfer & Ladd, 1996, Schäfer & Albrecht, in press). Kochenderfer-Ladd and Wardrop (2001) followed children's self reports from kindergarden to third grade and found only 4% to occupy the victim role at all four points of measurement. Monks et al.

(2003) did not find any stability of peer reported victim roles over a 4 months period. Schäfer and Albrecht (in press) used a pictorial self report measure (cf. Smith & Levan, 1995) and confirm no stability for the victim role over a three months period in 3rd and 4th graders. Bully roles, on the other side, are somewhat more stable than victim roles in primary school on the basis of peer-report measures. In first grade 13% of the children remain in the bully role over a four months period (Monks et al., 2003). In contrast, self report measures indicate no stable bully role for a period of three months in 3rd and 4th grade (Schäfer & Albrecht, in press). Taken together, in primary school it seems that victims are neither identified by peers nor by themselves as stable. In contrast, a stable bully seems slightly more clearly identified by peers but not by themselves.

The discrepancy between high victim prevalence and low victim role stability in primary school can be explained in two ways. First, those who attack others may not systematically choose particular targets for repeated aggression. They rather select victims on an ad hoc basis resulting in a broad array of different target, reflected in high victim prevalence and a low consistency reflected in low victim stability. Second, those who attack encounter a social environment in primary school in which a strong belief in the symmetry of power is endorsed (Krappmann & Oswald, 1995). Counterattacks are within the social norm resulting in high bully/victim prevalence (cf. Schäfer & Albrecht, in press) and the low tolerance for power differential facilitates the victim's choice of a more favorable social environment resulting in low victim stability.

The higher stability scores for bully roles within primary school are in line with the view that aggressive behavior is a function of personality and early socialization (see for a review, Loeber & Hay, 1997). In primary school, socialization factors within class seem to contribute to a lower extend to bully role stability than personality or socialization factors outside of the class context.

In secondary school the stability of both bully and victim roles is considerably higher than in primary school. Based on teacher reports, Olweus (1978) estimates two out of three male bullies and male victims to remain in their role over a one year period - even if teachers or the class context change. For mixed samples similar numbers were found using peer reports covering a one year period (Boivin, Hymel, Van Brunshot, & Cantin, 1998; Hodges & Perry, 1999). Self-reports from sixth to seventh grade indicate considerable victim role stability, which is somewhat lower than estimates based on peer reports (Korn, Kulis, & Schäfer, 2002). Finally for adolescents up to 95% agreement is reported between actual, and the previous year measurements for peer-reported victim and bully nominations (Björkqvist, Ekman, & Lagerspetz, 1982). Perry, Kusel and Perry (1988) concluded that by the age of 13 to 16 victim and

bully roles are firmly established. Taken together, in secondary school the victim and the bully roles are relatively stable according to multiple sources.

Moderate to high stability for victims and bullies is paired with lower prevalence rates for victims. In other words, the bully's target range seems to be restricted, resulting in a lower victim prevalence and the target consistency is higher, resulting in higher victim stability in secondary as compared to primary school.

Differential social dynamics in primary and secondary school

The principle of power symmetry present in primary school seems to be substituted by the principle of power differential in secondary school, which results in a hierarchical structure differentiating higher from lower status positions. In such a social environment, bullies can more selectively choose a low status victim (Perry, Perry, & Boldizar, 1990), which faces more difficulties to escape its role (Pellegrini & Bartini, 2000; Egan & Perry, 1999; Salmivalli, 2001) and is more likely to be subject to scapegoating and increased rejection, if peers do not manage to stop the bully's attacks within a short period (DeRosier, Cillessen, Dodge, & Coie, 1994).

We assume this to root in differences of peer hierarchies. The more hierarchical the peer structure, the higher would be the likelihood for victims to remain at the bottom of the structure. The comparatively weak social structure in primary school limits the bully's strive for dominance to be enacted in mainly dyadic encounters, which are distributed over several children in class. It allows the victims to evade into more favorable dyadic interactions. This could explain the high prevalence and low stability for victim roles consistently found in primary school. The stronger hierarchical structure in secondary school classes provides a more reliable context for strategic considerations of dominance seeking individuals. Social ranking implies "weaker" positions to be evident and thus allows the bully's strive for dominance to more consistently target particular individuals in class. The victims' evasion is prohibited by the low social status in a strong hierarchy. This could explain the low prevalence and high stability of victim roles in secondary school.

From the perspective taken here the bully role is mainly determined by the bully's strive for dominance, which arguably can be expected to be stable over time. In contrast the victim role is mainly determined by characteristics of the social context that may change. The confidence in our theoretical reasoning should increase if bully roles tend to remain stable from primary to secondary school whereas victim roles wouldn't. Accordingly, our research interest is to

investigate the stability of bully and victim roles from primary to secondary school and to further characterize each role in the respective social contexts.

Peer hierarchies and the stability of bullying roles

We started with the presumption that a major characteristic that distinguishes the social contexts of primary and secondary school is the degree of peer hierarchies. It should be generally lower in primary as compared to secondary school because early stages of socio-cognitive development predominant in primary school children limit the size and complexity of social networks that can be perceived and handled. However, socio-cognitive development proceeds within a certain range of variance and it is known that by the end of primary school the socio-cognitive skills have developed beyond dyadic relationships towards more complex social networks (Cairns & Cairns, 1991). Thus, in a sample of primary school classes peer hierarchies should be evident in some instances. Some cases of stable victim roles have been observed in primary school (Kochenderfer-Ladd & Wardrop, 2001; Schäfer & Kulis, 2001; Schäfer Korn, Smith, Hunter, Meulen, Moran-Merchan, & Singer, in press), however, their association with peer hierarchies has not been investigated.

Peer hierarchies should have the following effects on the stability of bullying: With a low degree of hierarchical structuring in class, bullies are more likely to exhibit a broad target range, while victims are more likely to leave asymmetric power relationships which they perceive as unfavorable. With a high degree of hierarchical structuring particular victims are attacked more consistently by bullies while victim loose social control, as peers refrain from supporting victims because they fear to be attacked themselves, feel discouraged from intervening by diffusion of responsibility, or prefer siding with the “stronger” bully (O’Connell, Pepler, & Craig, 1999). This should result in victims being more likely to remain in a victim role when hierarchical structuring is pronounced. Unlike victims in a low hierarchy context, they are less likely to proactively leave unfavorable interactions and more likely to display behavioral patterns that make them a preferred target for new bullying attacks - even if their class context changes.

We therefore hypothesize children who are victimized in primary school classes with comparatively high hierarchical structuring have a higher risk to remain in the victim role in secondary school classes than children who are victimized in primary school classes with comparatively low hierarchical structuring.

In contrast, the stability of bully roles should be unaffected by differences in peer hierarchies. The aggressive behavior displayed by bullies is about equally reinforced under both conditions, low and high hierarchical structuring.

Consecutively victimizing several children, each temporarily, within a weak hierarchy fulfills the bully's reward expectancies (Egan, Monson, & Perry, 1998) to similar extent as does consistently victimizing one child within a strong hierarchy.

Therefore, we hypothesize children who actively bully others in primary school classes with high hierarchical structuring have the same risk to remain in the bully role in secondary school than children who bully others in primary school classes with low hierarchical structuring.

Peer rejection and bullying roles in primary and secondary school

In order to further characterize victim and bully roles in primary and secondary school we draw on the concept of social rejection. Social rejection, defined as negative peer response, is a consequence of non-normative behaviors like aggression and disruptiveness as well as inappropriate, self-centered behaviors when approaching peers (Puttalaz, 1983). In line with Coie's (1990) theory of peer rejection, the non-normative behaviors associated with social rejection are seen as a product of early socialization. Social rejection towards bully or victim roles is used here as an indicator of non-normative behavioral styles displayed by bullies or victims.

The findings from previous studies about the relationship between bullying roles and social rejection suggest the following pattern: in primary school bullies are more likely to be rejected than victims, while in secondary school victims are more likely to be rejected than bullies. For primary schools Monks et al. (2003) describe that peer reported bullies are more rejected than victims and other peers (see also Wolke & Stanford, 1999), while victims and other peers don't differ in rejection. This pattern can also be explained on the basis of Krappmann and Oswald's (1995) characterization of primary school class context. The bullies' broadly distributed attacks activate negative reactions from *several* peers, not only those being targeted but also those who observe the aggressive attacks. No process is identifiable that would make victims as distinctive for negative peer response as bullies are. The broad distribution of the bullies' attacks actually should result in rejected and non-rejected children to be targeted as victims about equally likely.

For secondary schools, the mechanisms underlying higher peer rejection for victims and lower peer rejection for bullies seem to be more complex. Towards bullies peer reactions are mixed: On the one hand they receive rejection (Coie & Kupersmidt, 1983; Dodge, 1983; Patterson, DeBaryshe, & Ramsey, 1989), on the other hand, they gain popularity with increasing age (O'Connell et al., 1999;

Pellegrini, Bartini & Brooks, 1999; Salmivalli et al. 1996, 1998; Sutton, Smith & Swettenham, 1999), which goes along with an increase in positive attitudes towards bullying in adolescents (Salmivalli, 2001; Crick & Werner, 1998). Bullies who do not get victimized themselves have been shown to be socio-cognitively skilled above average (Sutton et al., 1999). Bullying a low status individual is neither likely to result in a strong defense nor in peer support for the attacked, ensuing a minimal risk to be defeated and to receive peer rejection. Victims, in contrast, are consistently shown to receive peer rejection in secondary school (Boulton & Smith, 1994; Perry et al., 1988; Schäfer, Werner & Crick, 2002; Schuster, 1996). It has been argued that non-normative behavior that is associated with social rejection and low status constitutes a tag for being targeted by a bully (Hodges, Malone, & Perry, 1997). Another factor that increases the association between victimization and peer rejection is rooted in group dynamics. When a significant number of peers have negative attitudes towards a particular child, group dynamics reduce the likelihood that this child can change negative peer evaluation by changing its behavior (Coie & Kupersmidt, 1983). Once a negative peer reputation is acquired, a child has to struggle much harder to overcome it (Coie, 1990). This can explain why stable peer rejection predicts the severity of victimization (Boivin, Hymel, & Bukowski. 1995; Boivin et al., 1998).

In summary it is hypothesized that in primary school social rejection is more strongly associated with the bully role than with the victim role, while in secondary school social rejection is more strongly associated with the victim role than with the bully role.

Summary of hypotheses

Hypothesis 1: The degree of hierarchical structuring is higher in secondary school than in primary school.

Hypothesis 2: From primary to secondary school bully roles are more stable than victim roles.

Hypothesis 3: High levels of hierarchy in primary school predict victim role stability from primary to secondary school while no such moderating effect exists for bullying role stability.

Hypothesis 4: In primary school bullies are more rejected than victims and vice versa in secondary school.

Method

Design

In the present study children that were identified as victims, bullies or neutral in 2nd /3rd grade of primary school classes in a previous study (Wolke, Woods, Schulz & Stanford, 2001) were followed up. Six years later, in 7th / 8th grade of secondary school, the former primary school victims, bullies or bully/victims and their current classmates in secondary classes were re-assessed.

Sample

Thousand five hundred and twenty two primary school children (51% male) of 2nd and 3rd grade from 67 schools in Munich and its surrounding area formed the primary school sample to be regarded as representative for South Bavaria (see Wolke et al., 2001).

From this sample 47 victims, 22 bullies and 79 bully/victims were identified as seriously being involved in bullying once or several times a week following a commonly agreed procedure (Olweus, 1989, see below). These children, together with children of neutral status formed the focus group for the follow-up study carried out six years later. In secondary school 2958 7th and 8th graders (50 % male) from 114 classes at 89 schools of all school types formed the second sample. Altogether 283 children were identified in both samples and thus available for longitudinal comparisons contributing a full data set from assessment in primary and secondary school. Based on the whole data set it was determined that class mates were generally not transferred from the primary school into the same classes at secondary school, nearly 100% were in new class contexts.

Attrition. The reasons to drop out of the sample of victims, bullies and bully/ victims from primary to secondary school are described in Table 1. Comparisons of those who remained in the study and those who dropped out did reveal no significant differences in prevalence between the three roles ($Chi^2(5, N = 148) = 2.07$, *n.s.*).

Also shown in Table 1, we re-identified another 28 victims, 24 bullies and 28 bully/victims from the primary school sample, in classes already set for the follow-up investigation. These children were involved in bullying in primary school sometimes within the last three months and thus labeled as moderate victims, bullies or bully/victims due to standard classifications (Olweus, 1987, see below). They were included thus making up a sample of 61 victims, 39 bullies and 74 bully/victims for longitudinal comparisons. Finally there were 133 children in the follow-up sample, that had been identified as not involved in

bullying in the primary school sample. We chose these children (classified as „neutral“) as control group for longitudinal comparisons on role stability within the follow up study. Note that this group is underrepresented in numbers when compared to cross sectional distributions of role/status frequencies.

Table 1: Dropouts for the follow-up: The longitudinal sample dependant on primary school bullying roles.

	Primary school bullying roles		
	Victims	Bullies	Bully/Victims
Identified at t_1	47	22	79
Lost in Primary school[a]			
No Information	1	1	8
Moved city	1		7
Lost in Secondary school[b]			
No Information	5	3	5
Moved city	2	1	4
School withdraws	1	1	6
Lost for other reasons	5		3
Found at t_2	33	15	46
Found at t_2 and added[c]			
Moderate roles	28	24	28
Longitudinal sample	61	39	74

Note: Values represent numbers of participants.

[a]Participants could not be identified by primary school administration due to the reasons mentioned. [b]Participants – told to be there by primary school administration – could not be identified by secondary school administration due to the reasons mentioned. [c]In search for the serious victims, bullies or bully/victims, these individuals with moderate roles at t1 were re-identified and added to the follow-up sample.

Procedure and assessment

A set of instruments was used at both time points. Concerning the longitudinal data reported here we refer to bullying experiences assessed based on the BVQ (Bully/Victim Questionnaire: Olweus, 1989), to measures of social status, namely social rejection and social acceptance and to a measure of “degree of hierarchical structuring” which is calculated on class level (assuming all respondents available in each sample) and originates from sociometric “like most” and “like least” nominations.

In primary school all measures were administered in a structured individual interview (see Wolke et al. 2001). For sociometric use each child who had received parental consent then had a Polaroid photograph taken of them. For those children who did not receive parental consent or were absent from the study on the day of the interviews, name cards were made for them to be identified by peers. The interview that was taken with each child individually covered both, the assessment of bullying and social status.

In secondary school we relied on classwise questionnaire measures. All measures were completed during a single 45-minute classroom session conducted by a research assistant. Parents had been informed about the investigation by the headteacher of each school and asked for their consent for participation. In the scare cases where parental consent had been refused (less than 1%), the child was offered the questionnaire to fill in (to prevent possible stigmatization), but these questionnaires were excluded from the study. The anonymity of responses was assured to all pupils. When confronted with the questionnaire children were asked to respond to the questions as it fits their personal experience best and they were reminded of not communicating about their answers during investigation. They were reassured that there aren't „wrong" answers. Ethical and formal permission for both parts of the study was obtained from the Ministry of Education, Bavaria.

Bullying experiences

In *primary school* bullying experiences were assessed by several questions adapted from the BVQ (Olweus, 1989). First, children were asked whether they had experienced any of six behaviors in the last six months that had upset them: Having been called bad or nasty names; Having belongings taken; Having lies told about them; Having nasty tricks played on them; Having been threatened or blackmailed; Having been hit or beaten up. If the child answered that s/he had experienced any of the six above behaviors, the child was asked to give examples and describe how this happened, to ascertain that the behaviors experienced were carried out with intent by the perpetrator(s) to upset the child and the child felt s/he could not defend her/himself rather than having occurred by accident or during play fighting. Those children who had experienced one or more of these behaviors were asked how frequently these incidents happened in the last six months (never; seldom (=one to three times); frequently (= four times or more); very frequently (=at least once per week)). To aid children's reference to approximately six month periods, anchors such as "since last Christmas", "since the summer holidays" etc. were used. The six behaviors were then repeated and the child responded to the question whether they have used these behaviors to upset other children and how often they had done this over the last six months in the manner described above.

A set of dichotomous variables were created by classifying those children who reported being bullied “frequently” (equals more than 4 times over the period covered) or “very frequently” during the last term as *victims* and those children who reported bullying others “frequently” or “very frequently” during the last term as *bullies*. Children who were identified as both victims and bullies were classified as *bully/victims*. Children who weren’t identified as victims, bullies or bully/victims were labeled *neutral* children.

In *secondary school* classes pupils responded to a modified version of the BVQ[1] (Olweus, 1989; Whitney & Smith, 1993). The BVQ consists of 24 questions about children’s experiences of being the victims of bullying and of bullying other children within the last 3 months. Children were provided with a definition of bullying and then asked “whether they had been bullied within the last 12 weeks (= since easter break)”. Children responded to a five point scale from 0 (= I wasn’t bullied at all) to 4 (several times a week). In the manner described children also responded to the question “whether they had bullied others or took part in bullying others within the last 12 weeks (= since easter break)”.

A set of dichotomous variables were created by classifying those children who reported being bullied “sometimes or more frequently” during the last term as victims and those children who reported bullying others “sometimes or more frequently” during the last term as bullies. Like in primary school children who were identified as both victims and bullies were classified as *bully/victims*. Children who weren’t identified as victims, bullies or bully/victims were labeled *neutral* children. Note that the set on criterium (“sometimes” and more) to identify a bullying role resembles occurrences beyond “one or two times” in the period covered, while in primary school the set on criterium to identify a bullying role was set to “frequently” and more, which resembles occurrences of “four times and more” in the period covered. We perceive these setups – even though very different in wording - close enough to classify the roles in primary and secondary school as equivalent.

Role Stability

To quantify the stability of bullying roles from primary to secondary school, the relative risk was calculated to determine whether the probability to remain in a role between time 1 and time 2 exceeds the probability that a person who didn’t hold the role at time 1 acquires this role at time 2. We treated the status of bullying-role (i.e. bully, victim, bully/victim or neutral) in primary school *as a risk factor* for the assignment to the same role in secondary school (i.e. stability),

[1] The instrument was translated into German by the first author and back-translated by Kirsten Madsen, a native speaker of English with a knowledge of the German language.

which was treated *as primary outcome.* See Table 2 for the notations used in the following.

Table 2: Determination of the relative risk.

	Role in secondary school [b]		
Role in primary school[a]	Present	Absent	Total
Present	a	b	a + b
Absent	c	d	c + d
Total	a + c	b + d	n

Note: [a]I.e. risk factor. [b]I.e. primary outcome.

An appropriate estimate for the differences in two populations exposed to different risk factors in prospective studies is the calculation of the *relative risk* (RR). The risk of a child to be found in a specific role (e.g. bully) in secondary school if it has already been in this role in primary school is described by the quotient a/(a + b). Similarly, the risk to be found in a role in secondary school if not having been in this role in primary school is described by the proportion c/(c + d). RR is defined as the ratio of these two risks RR = [a/(a + b)]/[c/(c + d)] = [a * (c + d)]/[c * (a + b)]. The neutral result, RR = 1, reveals the same rate of children with a specific role (e.g. bullies) in secondary school has been observed in primary school for both, children with and children without this role. This would indicate that for example being a bully in primary school is independent of being bully in secondary school. Subsequently the *risk* for the primary outcome can be seen as relative to the presence or absence of the *risk factor*. The confidence interval was computed as follows: 95% CI = RR^{1 + [1.96/(χ^2)^0.5]}, while χ^2 = [n(ad – bc)^2]/[(a + c)(b + d)(a + b)(c + d)].

Social Status

In *primary school* social status was assessed as part of the interview but prior to the questions on bullying. The child was confronted with a square matrix containing the photos and name cards of the children in their class. To ensure that the child was able to read the name cards and recognized all the children in the photos, the interviewer randomly asked the child to say out aloud the names of children on the cards or on the photos. Next, the child was asked to select and take out of the matrix up to 10 children that they liked and whom they liked to play with in their class. The photos were replaced into the matrix and the child was then asked to select up to 10 children whom they did not like or did not like to play with in their class. However for the purpose of this study we only used up to three nominations to secure comparability with the secondary school data.

In *secondary school* children viewed a class roster and were asked to nominate up to three classmates they liked to play with the most and up to three classmates they liked to play with the least (see e.g., Coie & Dodge, 1983). Identification numbers were used to answer these questions instead of children's names.

For both primary and secondary school assessment, social acceptance and social rejection scores, respectively, were created by summing up the number of liked most and liked least nominations and standardized within class. Additionally status groups were created, following the procedure recommended by Coie, Dodge and Coppotelli (1982). Therefore the two (classroom-standardized) values for liked least (zLL) and liked most (zLM) were added (zLM + zLL) to create a value for the social impact (SI) and subtracted (zLM – zLL) to create a value for the social preference (SP). SI and SP were again standardised on classroom level. Children were assigned to the rejected group, if $zSP < -1.0$, $zLL > 0$ and $zLM < 0$.

Peer hierarchies

To determine the degree of peer hierarchies within classes, we draw on the assumption, that without hierarchical structuring in place children should distribute their liked most and liked least nominations widely over all the children in class, while with peer hierarchies in place liked most and liked least nominations should be more centered on a few children. Thus we calculated social impact scores by first summing up liked least and liked most nominations on individual level and then aggregated them on class level. We decided for the standard deviation of social impact scores on class level as the best measure to demonstrate peer hierarchies with low scores indicating that most children have similar social impact (low degree of hierarchical structuring) while high scores indicate, that there is high disparity in social impact (higher degree of hierarchical structuring).

Furthermore we categorized values within primary and secondary school classes separately as high, if above the second percentile and as low if below the second percentile. For individual level analyses, each individual was assigned its class value, indicating whether the individual comes from a class with high or low degree of hierarchical structuring.

Results

The results are reported as follows: First, the degree of peer hierarchies in primary and secondary school classes is compared and the stability of bullying roles from primary to secondary school is determined. Second, it is analyzed whether the degree of peer hierarchies in primary school classes moderates the stability of bullying roles from primary to secondary school. The same analysis is conducted for the stability of peer rejection. Finally the bullying roles within primary and secondary school are further characterized in differentiating the victim and the bully role by the degree of peer rejection, peer acceptance and aggression attributed to each role at each point in time.

Peer hierarchies

The degree of peer hierarchies was identified as a characteristic of the social context relevant for bullying, which distinguishes primary from secondary school classes. It was hypothesized that the hierarchical structuring in secondary school classes is more pronounced than in primary school classes. A T-test for independent samples was used to compare the degree of hierarchical structuring between primary and secondary school as the classes in primary school comprised different sets of individuals than classes in secondary school. In line with our hypothesis, in secondary school classes hierarchical structuring (M = 2.94, SD = 0.76) was significantly higher than in primary school classes (M = 2.67, SD = 0.57), $t_{(1,179)} = 2.74$, $p < .01$. [2]

Stability of bullying from primary to secondary school

Based on the assumption that the social contexts in primary and secondary school classes differ, we hypothesized that for a victim role, which is predominantly determined by characteristics of the social context, stability from primary to secondary school is lower than for the bully role, which is mainly determined by the bully's strive for dominance. Table 3 shows the transition matrix from an individual's role in primary school (columns) to its role in secondary school (rows). Four roles are distinguished: neutral, victim, bully, and bully/victim. Each cell contains the relative frequencies per row (counts per row in brackets), that is, for each role in primary school the proportions of individuals found in one of the four roles in secondary school are given.

[2] The Levene-Test revealed variance to differ significantly (F = 6.90, p = .009). Therefore the adjusted t-value is reported here.

Table 3: The distribution of bullying roles from primary to secondary school.

	Roles in secondary school				
Roles in ps[a]	Neutral	Victim	Bully	Bul/Vict[b]	Total
Neutral	59 (73)	13 (16)	20 (25)	7 (9)	100 (124)
Victim	61 (34)	20 (11)	13 (7)	7 (4)	100 (57)
Bully	50 (17)	12 (4)	32 (11)	6 (2)	100 (33)
Bul/Victb	63 (43)	10 (7)	15 (10)	12 (8)	100 (69)
Total	59 (167)	14 (38)	19 (53)	9 (24)	100 (283)

Note: Values represent percentages of participants with roles in primary school found in a role in secondary school. Values in brackets represent numbers of participants. [a]Primary school [b]Bully/victim.

Irrespective of the particular role held in primary school, the majority of children (64%) change their roles from primary to secondary school. Most of them change towards a neutral status (59%). For determining the relative risk of stable involvement in bullying, disregarding the particular bullying roles, the frequencies as shown in Table 3 were used. In primary school 159 individuals were involved in bullying (as victim, bully or bully/victim), 64 of them were still involved in secondary school. On the other hand 124 children were not involved in bullying in primary school, 50 of them got involved in bullying in secondary school. Dividing the first quotient by the second results in a relative risk of *RR* = (64 / 159) / (50 /124) = 1.00, which is not significant because the 95% confidence interval (*CI*), ranging from 0.7 to 1.4, does not surpass the expectation value set to 1. In other words, primary school involvement in bullying does not allow predictions about bullying involvement in secondary school. There is no stability for overall bullying involvement over the investigated six years period from primary to secondary school.

However, a more detailed analysis is necessary to determine the stability for particular bullying roles. The diagonal in Table 3 displays the row proportions of children who remain in the same role in primary and secondary school. This proportion is highest for the neutral status (59%), followed by the bully role (32%), the victim role (20%) and the bully/victim role (12%). To identify the stability of each role, the relative risk for the victim-, the bully- and the bully/victim-role was determined. Risk analysis shows that being a victim in primary school is not a significant risk factor for being a victim in secondary school, *RR* = (11 / 56) / (27 / 226) = 1.64 (95% *CI*: 0.9 -3.1; *n.s.*). In contrast, being a bully in primary school constitutes a significant risk for being a bully in secondary school, *RR* = (11 / 34) / (42 / 248) = 1.91 (*CI*: 1.1-3.4; *p* = .03). Being

a bully/victim in primary school is not a risk factor for remaining in this role in secondary school, *RR* = (8 / 68) / (16 / 214) = 1.57 (*CI*: 0.7-3.5; *n.s.*).

In summary, over a period of six years, from primary to secondary school, overall bullying involvement seems to be unstable. However, in line with our hypothesis, the bully role was found to be stable while the victim role was not.

Peer hierarchies in primary school classes as a moderator of the stability of bullying roles from primary to secondary school

It was further analysed as outlined in the introduction whether the degree of peer hierarchies in primary school classes moderates the stability of the victim role. Risk analyses indicates a significant stability for the victim role from primary to secondary school, when hierarchical structuring in primary school was high, *RR* = (8 / 30) / (11/ 111) = 2.69 (*CI*: 1.28 – 6.09; *p* = .02). In contrast, no significant victim role stability was obtained when hierarchical structuring in primary school was low, *RR* = (3 / 26) / (16/ 113) = .82 (*CI*: 0 .26 – 2.59; *p* = .73). For the hypothesized contrast, that is, victim role in secondary school (yes = 1, no = 0) is predicted by victim role in primary school in combination with hierarchical structuring in primary school (yes - high = 1, yes - low = 0, no - high = 0, no - low = 0), a significant goodness of fit value was obtained, $Chi^2_{(1,\ 282)}$ = 4.194 (*p* = .04). The effect size is small to moderate, Nagelkerke R^2 = .03.

The bully role stability does not seem to be moderated by the degree of peer hierarchies in primary school classes because the relative risk is similar in classes with high hierarchical structuring, *RR* = (3 / 12) / 17/ 129) = 1.90 (*CI*: 0.65 – 5.56; *p* < .27) as compared to classes with low hierarchical structuring, *RR* = (7 / 21) / (25/ 118) = 1.57 (*CI*: 0 .78 – 3.16; *p* = .23).

Stability of social rejection. In the literature, the patterns of behavior shown in class associated with social rejection (e.g. non-normative behavior) are seen as a product of early socialization. On that basis we hypothesized high stability in social rejection by peers across the changing social contexts from primary to secondary school. Risk analysis confirms this view. Peer rejection in primary school constitutes a high risk for being rejected in secondary school, *RR* (15/49) / (22/272) = 3.6; (95% *CI*: 2.0 to 6,4. *p* = .01). The stability of social rejection is not moderated by the degree of peer hierarchies in primary school classes. The relative risk is similar in classes with high hierarchical structuring, *RR* = (5 / 23) / (9/ 133) = 3.21 (*CI*: 1.18 – 8.73; *p* = .02), and low hierarchical structuring, *RR* = (10 / 16) / (14/ 137) = 3.76 (*CI*: 1.87 – 7.54; *p* = .01).

Differential characteristics of bully and victim roles in primary and secondary school

It was argued that the quality of bullying roles differs between primary school and secondary school. Therefore, in the following we characterize bullying roles by analysing levels of social rejection and social acceptance by peers associated with the victim role and the bully role. Furthermore, we explore self-reported aggression in how it characterizes the victim and the bully role in primary and secondary school.

Peer rejection and acceptance

It was hypothesized that in primary school social rejection is more strongly associated with the bully role than with the victim role, while in secondary school social rejection is more strongly associated with the victim role than with the bully role. On each school level two one factorial ANOVAs were conducted comparing bullies, victims and neutrals on the degree of peer rejection and peer acceptance as independent variables. In *primary school classes*, we found significant differences for both social rejection ($F_{(3,1462)}$=19.89, $p < .001$) and social acceptance ($F_{(3,1462)}$=2.98, $p < .05$). Post-hoc tests (Scheffé) revealed that bullies were more rejected than victims and neutral children (no difference between victims and neutral children was evident) whereas for social acceptance no significantly different subgroups could be identified. In *secondary school classes* again differences for both social rejection ($F_{(3,2649)}$=86.45, $p < .001$) and social acceptance ($F_{(3,2649)}$=33.40, $p < .001$) were significant. Post-hoc tests (Scheffé) show a more consistent pattern, that is, victims are significantly more rejected and significantly less accepted than bullies and neutral children (no differences between bullies and neutral children were evident). Our data confirms a shift in peer perception of bullying roles from primary to secondary school with rejection predominantly attributed to bullies in primary school and to victims in secondary school.

Aggression

Levels of self-reported aggression for all bullying roles (victim, bully, bully/victim) and neutral children were explored within primary and secondary school. For primary school, a one factorial ANOVA with aggression as dependent variable was conducted ($F_{(3,1462)}$=1306.2, $p < .001$). Post-hoc tests (Scheffé, $p < .05$) reveal that bullies (M = 2.16, SD = 0.37, n = 130) and bully/victims (M = 2.26, SD = 0.44, n = 190) report significantly more aggression than victims (M = 0.57, SD = 0.50, n = 235), and victims report significantly more aggression than neutral children (M = 0.34, SD = 0.47, n = 908). Also for secondary school, a one factorial ANOVA with aggression as dependent

variable was conducted ($F_{(3,2647)}$=2236.8, p < .01). Post-hoc tests (Scheffé, p < .05) reveal that bullies (M = 2.53, SD = 0.81, n = 536) and bully/victims (M = 2.63, SD = 0.88, n = 174) report significantly more aggression than victims (M = 0.42, SD = 0.50, n = 331) and neutral children (M = 0.39, SD = 0.49, n = 1607), with no difference between victims and neutral children. Obviously, in primary school victims report higher levels of aggression as compared to neutral children than in secondary school. It seems that in secondary school aggressive behavior is less common among victims than in primary school. A similar conclusion can be derived from a primary versus secondary school comparison of the relative frequencies of the bully/victims (who by definition display high levels of aggression) seen as a subgroup of all victims. In primary school, bully/victims account for 45% of all victims (N = 425), whereas in secondary school they only account for 34% of all victims (N = 505). The decrease in highly aggressive victims (bully/victims) supports the view that in secondary school aggressive behavior is less common among victims than in primary school.

Discussion

It was shown, that a victim role in primary school does not serve as a risk factor for a victim role in secondary school, whereas a bully role in primary school provides a two times increased risk for a bully role in secondary school. For comparison, being rejected in primary school was shown to provide a four times increased risk for being rejected in secondary school.

Cross-sectional analysis confirmed a lower degree of peer hierarchy in primary as compared to secondary school classes. Further, it was evident that the degree of hierarchical structuring in primary school classes moderates the stability of the victim role only: Victim role stability is higher for individuals from primary school classes with high hierarchical structuring as compared to those from classes with low hierarchical structuring. Moderating effects were presented neither for bully role stability nor for being rejected. Finally, in primary school the victim role is often characterized by counterattacking and victims are significantly less rejected by peers than bullies. In contrast, in secondary school victims are significantly more rejected and less accepted than bullies.

The stability of victim and bully roles

One out of five victims in primary school was identified as victim in secondary school, which is not different from the ratio of non-victims in primary school to be identified as a victim in secondary school. Thus a victim role in primary

school does not constitute a risk factor for a victim role in secondary school. In contrast, one out of three bullies in primary school remained a bully in secondary school, which significantly differs from the lower ratio of non-bullies in primary school who became bullies in secondary school. Thus a bully role in primary school constitutes a risk factor for occupying a bully role in secondary school. This pattern of findings is in line with results from the study reported by Monks et al. (2003), that used peer nominations and reported on stability in the early years of primary school. Our results extend Monk's findings by showing that the instability of victim roles and the stability of bully roles (both measured by self-reports) transcend from early primary to mid secondary school.

Paul and Cillessen (in press) identify the victim role and Pelligrini and Bartini (2000) identify both victim and bully roles to be stable from primary to secondary school. Both findings partially contradict our results. However, the present study covers a time period of 6 years, from early primary school (mean age 8 years) to mid secondary school (mean age 13.6), whereas Paul and Cillessen (in press) cover a shorter time period of 3 years from late primary school (estimated mean age 10 years) to early secondary school and Pelligrini and Bartini's study covers an even shorter time period of about 18 months which extends from very late primary school (estimated mean age 12 years) to early secondary school. Thus, in both studies the entry age is higher and the time period covered is considerably shorter than in our study. The discrepant results find a plausible explanation in the assumption that in late primary school the social context in class has already evolved into a "dominance driven" (cf. Pelligrini & Bartini, p. 720) social system with a pronounced hierarchical structure. At that stage the primary school class context should resemble the social context of secondary school classes more than the "anarchical" social context within early primary school classes. This explanation is supported by two of our findings. First, it was shown that the peer hierarchies in secondary school classes are significantly more pronounced than in primary school classes. It seems that interaction in class becomes increasingly "dominance driven" or status conscious from primary to secondary school. Second, it was shown that a victim role in primary school classes with high hierarchical structuring is stable (i.e. it predicts victim role in secondary school class). In conjunction with previous evidence that victim roles are stable in secondary schools (Boivin et al., 1998; Hodges & Perry, 1999), our findings suggest that victim role stability is a function of the degree of hierarchical structuring in class. These results extend the findings from Pelligrini and Bartini (2000) and Paul and Cillessen (in press) rather than contradicting them.

By definition the victim role is experienced as an unfavorably asymmetric relationship from which the role occupant seeks to escape. In a social system

build upon dyadic symmetry rather than complex power differential, as was described for primary schools by Krappmann and Oswald (1995), victims should have more opportunities to escape from unfavorable relationships, which results in victim role instability. In other words, low hierarchical structuring should be associated with instable victim roles and high hierarchical structuring should be associated with stable victim roles. This pattern is consistent with our findings.

The bully role in primary school should be experienced as a more favorable asymmetric relationship from which the role occupant not necessarily seeks to escape. This already can explain an increased likelihood that a bully repetitively shows aggressive behavior which results in bully role stability. However, the more interesting is the finding of stable bully roles to be independent of the degree of peer hierarchies found in primary school class. From the early "anarchical" phase in primary school bullies have a significant risk to remain in their role six years later. Note that the bully role in early primary school leads to rejection by peers rather than to popularity. The peers forming the social context of bullies respond negatively to their aggressive behavior, which, however, does not seem to destabilize the bully role. This raises the question of why the bully role is stable and what factors contribute to its stability from early primary school to mid secondary school.

The long-term risk to remain in the bully role may be due to personality factors. Their shaping in developmental contexts before school entry or outside primary and secondary school context (e.g., family context, Loeber & Hay, 1997) can nurture a stable behavioral tendency to aggress others. Pelligrini and Bartini (2000) argue that this tendency is driven by seeking dominance over others rather than just aggressing others (see also Roland & Isdøe, 2001), a motive that finds a particularly suitable environment in hierarchical social systems. While the early primary school context does not seem to foster the stability of bullying, the secondary school context definitely does. As was found in the present study as well as in others (e.g., Rigby & Slee, 1998), a bully in secondary school is much more likely to be rewarded (e.g. average popularity, low rejection), than sanctioned (O'Connell et al., 1999) and does not differentiate from neutral children in the degree of social rejection.

Social rejection

Our findings extend on previous reports on the stability of social rejection (see for an overview, Cillessen, Bukowski & Haselager, 2000; Coie & Dodge, 1983; Coie, 1990) by showing that being rejected in primary school is a serious risk factor for ongoing social rejection in secondary school over a time span of six years. The fact, that the present study features a nearly 100% change of peers in class between primary and secondary school makes this finding even more

concerning. Compared to the moderate magnitude for stable bully roles the very high stability of social rejection supports the view of non-normative behavior to be a strong component sustaining stability of negative peer response towards an individual from primary to secondary school. This view is supported by several researchers (e.g. Crick & Dodge, 1994; Coie, 1990; Cillessen et al., 2000).

Our finding that the stability of social rejection is not affected by the degree of peer hierarchies indicates that social context adds little to the stability reported here. Compared to the unstable victim role the stability of social rejection marks a substantial difference between the two constructs. This is in sharp contrast to attempts, which try to merge being a victim and being rejected into one construct (e.g. Schuster, 1996). Moreover the degree of hierarchical structuring found in primary school contributes to the stability of victims roles but does not affect the stability of social rejection. Thus, social context rather than personal factors appear to foster the stability of victim roles from early towards later periods of schooling while personal factors, evident in (non-normative) behavior seem to be more predictive than social context factors for the stability of social rejection.

More than two decades ago Perry, Kusel and Perry argued that being rejected and being victimised by peers are substantially associated but that the association is not close enough to consider the constructs equivalent, as both constructs differ in degree of covariation with aggression (Perry et al., 1988). Our data extend and strengthen this view by two further findings. First we showed that the pattern of association between rejection and the victim compared to the bully role differs between primary and secondary school. Primary school bullies are more rejected than victims, while secondary school victims are more rejected than bullies. In other words, there is a shift in peer recognition of roles as such and seemingly in how they perceive the underlying behavior. Second, we found that aggression characterises victims in primary school substantially more than in secondary school. The proportions of victims classified as bully/victims is remarkably higher in primary compared to secondary school. In line with findings reported by Roland and Isdøe (2001), this illustrates that being bullied and bullying others is not as distinct in primary school as it is in secondary school. Altogether this reveals, that the type of social organisation children form (e.g. due to their stage of socio-cognitive development) affects bullies attempts to dominate others and the variety of options, those attacked can choose from to handle this.

We speculate that in primary school, roles are not yet fully represented as a set of expectations about the behavior of a role occupant within a group. A victim role while positioned at the bottom of a social hierarchy in secondary school is

not yet established in early primary school where peer hierarchies are weak. Thus the pattern of low victim stability holds irrespective of whether victims are identified by peer-reports (Monks et al., 2003) or self-reports as in the present study.

However, even between primary school classes there are some variations in hierarchical structure which in turn influences stability in victimization. As neither victims nor stable victims in primary school are more rejected than non victims, a strong bully or affiliated aggressive children, skilled to impose a power differential on the class, might best explain higher hierarchical structuring promoting a stable victimization experience. Note that a primary class environment organized basically by dyadic relationships might be easy to dominate, as networking abilities to oppose this effectively are not in place. Thus peers confronted with a bully's strong strive for dominance at young age should perceive the concrete threat of better siding with "the power" or at least not opposing it directly. This subtracts the victim from "niches" generally available in a primary class environment to evade to. On one hand, this might foster behaviors of fear and anxiousness, shown by the victim and known to reinforce aggressive individuals like a bully (e.g. Perry, Willard & Perry, 1990). On the other hand, it increases stress for the victim (Sharp, Thompson & Arora, 2000) and leaves the victim "helpless", thus reducing internal thrust in coping strategies (Smith & Brain, 2000), altogether suspected to foster patterns of learned helplessness.

In secondary school, less individuals are confronted by bullies personally and aggression is distributed more selective. In simple words, aggressing an already disliked (low status) individual virtually manipulates social norms, as aggression directed towards the victim appears more "in line" with negative attitudes, thus probably less "non-normative". This shift in social norms, might be fostered by failing attempts to tackle aggression (by peers), which then, the victim might be additionally blamed for (DeRosier et al., 1994). The increase in pro-bullying attitudes from the beginning to the end of secondary school reported by Rigby and Slee (1998) and the positive relationship between overt as well as relational aggression and popularity reported by Vaillantcourt, Hymel, and McDougall's (2001) for secondary school strengthen the case. More sequential analyses are needed to extend what is experimentally outlined by DeRosier at al. (1994) on how the bully victim interaction affects the class climate to turn peer response negative towards the victim and positive towards the bully (cf. Crick & Werner, 1998). A more differentiated perspective on participant roles (Salmivalli, Lagerspetz, Björkqvist, Österman & Kaukiainen, 1996) is required. This should be tied to theoretical concepts of social modelling, diffusion of responsibility (e.g. O'Connell et al., 1999) or dissonance theory (e.g. Egan et al., 1999) to

enrole the importance of peer contribution of what increasingly identifies as a matter of social context and social interaction, rather than an arena for individualistic approaches.

While this study extends previous findings there are also limitations on bullying status. However an anonymous assessment by investigators not familiar with the respondents and unrelated to the school setting, has been advocated as adequate and valid measure of behavior s difficult to observe (Ahmad & Smith, 1990; Olweus, 1993). Similar patterns of findings for peer- and self reported bullying roles provided by Monks et al. (2003) and our data support this view especially when the relationship between bullying roles and social status in primary school is concerned. The same individual interview not relying on reading ability has been used in other studies and shown expected relationships to behavior and health problems (Wolke, Woods, Bloomfield & Karstadt, 2000; Wolke et al., 2001) Moreover for secondary school it is evidenced that self- and peer- reported bullying roles increasingly overlap (Schäfer, Werner & Crick, 2002). However it remains a topic of special interest to focus on the bullying construct with both, peer- and self assessment (e.g. by the participant role approach, Salmivalli et al., 1996) and to explain overlapping and non overlapping properties when assessed longitudinally (Salmivalli, 2001).

Conclusion

In conclusion, the results of this study contribute to the existing literature in this area by presenting first longitudinal evidence on how bullying roles develop from early primary to mid secondary school, that is from childhood to adolescents. Because prior studies have typically measured bullying role stability within primary or secondary school one could only speculate about whether a victim and a bully role in primary school presents a risk factor for similar bullying experiences in secondary school. Our findings suggest that, although overall there is no stability for the victim role and only moderate stability for the bully role from primary to secondary school, the degree of hierarchical structuring in primary school class moderates the stability of the victim role but does not affect the stability of the bully role. Moreover the difference in what characterises a victim or a bully in primary school compared to secondary school promotes a differential view on how to deal with bullying at primary and secondary school. Further research is needed, to better distinguish the specific sources and mechanisms that lead to an increasingly positive attitude towards bullies and to decreasing peer support for the victim. Increased peer hierarchies and personal attributes appear to play an important role with major implications for intervention efforts.

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