

The need for peer acceptance and affiliation as underlying motive for aggressive behaviour and bullying others among immigrant youth living in Austria and Norway

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Título: La necesidad de aceptación por los iguales como motivo subyacente del comportamiento agresivo y el acoso a los demás entre los jóvenes inmigrantes que viven en Austria y Noruega.

Resumen: Este estudio (1) comparó el nivel general de comportamiento agresivo y el acoso a los demás e (2) investigó el poder predictivo de dos motivos subyacentes – la agresión reactiva y las necesidades de aceptación por los iguales y de afiliación – entre jóvenes no inmigrantes e inmigrantes viviendo en dos países europeos. En Austria, se disponía de datos sobre el comportamiento agresivo, en Noruega, por su parte, el acoso a los demás, una subcategoría del comportamiento agresivo, fue analizado. La muestra incluía a 302 noruegos no inmigrantes (48,7% chicas), 161 adolescentes inmigrantes de primera generación que vivían en Noruega (51,6% chicas), 339 austríacos no inmigrantes (51,6% chicas), y 126 inmigrantes de primera generación (48,4% chicas) que vivían en Austria, de edades entre 14 y 16 años. El estatus de inmigrante se asociaba a niveles más altos de acoso a los demás en Noruega. En Austria, no se encontraron diferencias en el comportamiento agresivo. En ambos países, modelos de ecuaciones estructurales pusieron de manifiesto que la necesidad de aceptación por los iguales y de afiliación – pero no la agresión reactiva – predecía el acoso a los demás y el comportamiento agresivo entre los inmigrantes, pero no entre los no inmigrantes. Se comentan los resultados sobre el proceso de aculturación entre jóvenes inmigrantes viviendo en dos países europeos.

Palabras clave: jóvenes inmigrantes; comportamiento agresivo; acoso a los demás; agresión reactiva; agresión instrumental; afiliación; aceptación; adolescentes

Abstract: This study (1) compared the overall levels of aggressive behaviour and bullying others and (2) investigated the predictive power of two underlying motives – reactive aggression and the need for peer acceptance and affiliation – between non-immigrant and immigrant youth living in two European countries. In Austria, data on aggressive behaviour was available for analyses, while in Norway bullying others, a subcategory of aggressive behaviour was investigated. The sample comprised 302 non-immigrant Norwegians (48.7% girls), 161 first generation immigrant adolescents living in Norway (51.6% girls), 339 non-immigrant Austrians (51.6% girls), and 126 first generation immigrants (48.4% girls) living in Austria aged 14 to 16 years. Immigrant status was associated with higher levels of bullying others in Norway. In Austria, no differences regarding aggressive behaviour were found. In both countries, multiple group structural equation models revealed that the need for peer acceptance and affiliation – but not reactive aggression – was a predictor of bullying others and aggressive behaviour among immigrants, but not among non-immigrants. Results are discussed regarding the process of acculturation among immigrant youth living in two European countries.

Key words: immigrant youth; aggressive behaviour; bullying others; reactive aggression; instrumental aggression; affiliation; acceptance; adolescents.

Introduction

Raising numbers of children and youth were not born in their country of settlement, but migrated there from another country legally or illegally for many different reasons (IOM, 2010). Migration is an inherently stressful life event because of the manifold challenges associated with resettlement and acculturation (Berry, 2006). Research demonstrated that immigrant youth are more vulnerable for peer rejection (e.g., Strohmeier, Kärnä, Salmivalli, 2011; Strohmeier & Spiel, 2003; Motti-Stefanidi et al, 2008) and racist victimization compared with their non-immigrant counterparts (e.g., Jasinskaja-Lahti & Liebkind, 2001; Liebkind & Jasinskaja-Lahti, 2000a; McKenney, Pepler, Craig, & Connolly, 2006; Monks; Ortega-Ruiz, & Rodríguez-Hidalgo, 2008; Verkuyten & Thijs, 2002). Thus, to feel affiliated with and accepted by peers are particular challenges for immigrant youth. Youth can achieve such affiliation needs by prosocial or antisocial means (e.g., Hawley, 1999; 2003; Pellegrini, 2008). The present study exclusively focuses on the question whether the need for peer acceptance or affiliation is associated with aggressive behaviour or bullying others among immigrant

youth. This study applied the acculturative stress perspective (Berry, 2006) to peer relation research to better understand underlying motives for aggressive behavior and bullying others among immigrant youth. To improve the external validity of the findings, immigrant youth in two countries – Austria and Norway – were included in the present study.

Definitions of bullying others and aggression

Bullying others is usually defined as an externalizing behaviour problem and a subtype of aggressive behaviour with three key elements present: (1) intentional harm doing, (2) repetition and (3) imbalance of power (Olweus, 1991; Roland, 1989). These key elements are internationally accepted, although bullying others may be conceptualised slightly different depending on the language or culture (Smith, Cowie, Olafsson, & Liefoghe, 2002; Strohmeier, Aoyama, Gradinger & Toda, in press). In general, bullying includes a variety of negative acts, which can be delivered face-to-face or by indirect means. Physical or verbal insults are mostly visible and are therefore categorized as direct bullying. Hidden behaviour such as social exclusion, spreading rumours or manipulating relationships is considered to be indirect or relational bullying. Furthermore, bullying can also be carried out via electronic means or in the internet. This more recent form of bullying others is called cyberbullying (Gradinger,

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Strohmeier, & Spiel, 2009; Smith et al., 2008).

Aggressiveness, or the trait aggression, is defined as a stable tendency to hurt or attack someone else. Two underlying functions or motives to better understand trait aggression are described in the literature, reactive and proactive aggression (Card & Little, 2006; Dodge, 1991; Vitaro & Brendgen, 2005). Reactive aggression is theoretically grounded in the frustration-aggression model; therefore this kind of aggressive behaviour occurs as an angry reaction to a perceived frustration (Berkowitz, 1989). Proactive aggression, on the other hand, has its roots in social cognitive learning theory. This type of aggression describes a planned behaviour which is controlled by external rewards and reinforcements (Bandura, 1973; Vitaro, Brendgen, & Barker, 2006). While anger is the central emotion for reactive aggression, pleasure through social rewards is the dominant emotion for proactive aggression. Roland and Idsøe (2001) further distinguished proactive aggression regarding the particular goal – power or affiliation – that a perpetrator wants to achieve by aggressive means. Both power and affiliation goals were also distinguished in the literature dealing with children's social goals (Buhrmester, 1996; Ojanen, Aunola, & Salmivalli, 2007; Ojanen, Gronroos, & Salmivalli, 2005). While a perpetrator who is motivated by power acts aggressively to feel dominant and powerful, a perpetrator who is motivated by affiliation behaves aggressively together with others to feel affiliated with or accepted by them.

While both reactive and proactive aggression are important motives to better understand aggressiveness and aggressive behaviour, bullying others was found to be motivated by proactive aggression rather than reactive aggression, especially among adolescents (Roland & Idsøe, 2001; Salmivalli & Nieminen, 2002). Bullying others is therefore often considered as a proactive subtype of aggressive behaviour.

To investigate bullying others and aggressive behaviours in school is especially important given the evidence that both behaviours are risk factors for delinquency later in life. Based on a systematic meta-analytic review of longitudinal studies it was shown that the probability of offending up to 11 years later was much higher for school bullies than for non-involved youth (Ttofi, Farrington, Lösel & Loeber, 2011). Thus, to better understand underlying motives of bullying others and aggressive behaviour is also important regarding the prevention of delinquent behaviour later in life.

The need for peer acceptance and affiliation as a motive to bully or hurt others

Peer acceptance or affiliation as underlying motives of aggressive behaviour make it relevant to focus on peer groups when studying aggressive behaviour and bullying. In the bullying literature, bullying has long been understood as a group-phenomenon determined not only by characteristics of bullies and victims but also by social relationships or roles within the group (Salmivalli, Lagerspetz, Björkqvist,

Österman, & Kaukiainen, 1996). As empirical evidence shows, one important motive for bullying others is to gain social status, or to be accepted by peers (Olthof & Goossens, 2008; Salmivalli & Peets, 2008; Veenstra et al., 2007). Similarly, from an evolutionary-oriented perspective, social dominance was understood in terms of resource control and evidence shows that youth use both aggressive and affiliative behaviours to gain these resources (e.g., Hawley, 1999, Pellegrini, 2008).

However, studies applying these ideas to better understand peer relations among immigrant youth are still relatively scarce (e.g., Fandrem, Ertesvåg, Strohmeier, & Roland, 2010; Fandrem, Strohmeier, & Roland, 2009; Strohmeier, Fandrem, Stefanek, & Spiel, 2012) although the dimension “relationships” is one of the two central components in acculturation theory (e.g., Berry, 1997, 2006). According to Berry (1997), (1) maintenance of heritage culture and identity and (2) relationships sought with people from the other culture are the two basic dimensions involved in the acculturation process.

Thus, in the present study acculturation theory was applied on peer relation research. It is possible to investigate the impact of acculturation on motives of aggressive behaviour or bullying others by comparing non-immigrant youth with first generation immigrants. Thus, immigrant status can be used as a proxy variable for acculturation. First generation immigrants are not born in the country of settlement, but they have migrated there from another country. Just like non-immigrant adolescents, first generation immigrant youth have to cope with a set of developmental tasks such as academic achievement at school, social relationships with peers and family, psychological well-being, and identity formation (Strohmeier & Schmitt-Rodermund, 2008). In addition, immigrant (but not non-immigrant) adolescents are faced with the particular challenges of acculturation which are either directly associated with the process of immigration (e.g., resettlement) or with the status of being an immigrant in a foreign country (e.g., discrimination, racist victimization). Because only first generation immigrants have experienced the challenge of resettlement, it is reasonable to use generational status (controlled for length of stay) as a proxy variable to describe acculturation.

Levels of bullying in schools in Austria and Norway

In Austria, the prevention of aggressive behaviour and bullying others in schools has gained considerable public attention and a national strategy for violence prevention in the public school system has been developed and step-wise implemented since 2007 (Spiel & Strohmeier, 2007, 2011). In Norway, bullying prevention is an important public topic already since 1983 (Roland, 2000).

In both countries, prevalence rates of aggressive behaviour and bullying others vary according to methods used and samples investigated. A systematic comparison of bullying others between different countries is the Health Behaviours

in School-aged Children (HBSC) survey (Craig & Harel, 2004). According to this survey, Austria showed comparatively high rates of bullying and victimization in schools. Ten to 23% of youth aged 11 to 15 years reported to be bullied two to three times or more in the previous couple of months. In Norway, these rates were much smaller ranging between 3% for the 13 and 15 year old Norwegian girls and 10.7% for the 13 year old Norwegian boys and 11.3% for the 15 year old Norwegian boys. Another important source of comparative data is the Second International Self Reported Delinquency Study, ISRD-2 (Enzmann et al., 2010). This study reported the 12 month prevalence rates of self reported delinquency measured by 12 differently serious offences in 31 countries. In this study, data collected in one big city in Norway and two big cities in Austria were analysed. Compared with the other 29 participating countries, the 12 month prevalence rates were comparatively low in both Norway (16.6%) and Austria (22.1%).

Until now, very few studies have compared prevalence rates of general bullying and aggressive behaviour between students belonging to different ethnic, cultural or immigrant groups. Most of these studies find no differences between non-immigrants and immigrants (for an overview see Fandrem et al., 2009; Strohmeier & Spiel, 2012). Also rare is research on peer victimization among students belonging to different ethnic, cultural or immigrant groups. Most general bullying studies find no differences between non-immigrants and immigrants (for an overview see Strohmeier et al., 2011). Thus, based on these comparative analyses, there is little empirical evidence that immigrant or minority status, in and of itself, is a risk factor for bullying and general peer victimization (see also, e.g., Graham, Taylor & Ho, 2009).

In Norway, empirical findings are sparse and controversial. While Fandrem and colleagues (2009) using a large representative sample did not find any differences regarding the levels of peer victimization between non-immigrants and immigrants but found that immigrant youth bullied others more than non-immigrants, Bakken and Nordahl (2003) found that young immigrants were at higher risk for peer victimization compared to non-immigrant young people.

Studies conducted in Austria yielded more consistent results. In Austria, studies splitting immigrant youth according to their ethnic background showed that they were either at lower or at equal risk for being victimized and bullying others compared to non-immigrant youth (Bergmüller & Wiesner, 2009; Strohmeier & Spiel, 2003; Strohmeier, Atria, & Spiel, 2005; Strohmeier, Nestler, & Spiel, 2006; Strohmeier, Spiel, Gradinger, 2008).

Immigrant situation in Austria and Norway

In Austria, 1.468.101 million people (17.8% of the whole population) had an immigrant background in 2010 (Statistik Austria, 2010). 13.1% of the whole population were first generation immigrants because they were born in another country than Austria and 4.7% were second generation im-

migrants because they were born in Austria but one of their parents were born abroad. The three biggest immigrant groups migrated to Austria from former Yugoslavia (31%), Germany (14%), and Turkey (13%). Many immigrants migrated from Eastern European Countries (~ 14%), like Poland, Romania, Czech Republic, and Hungary.

In Norway, approximately 552.000 people (11.4% of the whole population) had an immigrant background as either they immigrated themselves (first generation) or they were born in Norway but one of their parents were born abroad (second generation) in 2010 (Statistics Norway, 2011). 47% of the immigrants migrated from Europe, 36% from Asia, 12% from Africa, 3% from South or Middle America, and 2% from North America or Oceania. Thus, the immigrant group in Norway is highly diverse as the immigrants living in Norway stem from 215 different countries, with the biggest groups being from Poland (9%), Sweden (5,5%), Germany (3,8%) and Iraq (3,6%), and the next biggest groups being from Pakistan, Somalia, Vietnam, Denmark, Iran, Turkey, Bosnia-Herzegovina, Russia, Sri Lanka, Philippines and Great Britain.

Depending on the region, both in Austria and in Norway there is a huge variation of the percentage of immigrants with the biggest proportions present in the two capital cities, Vienna and Oslo. In Vienna, the percentage of immigrants approached 36% (Statistik Austria, 2010), while in Oslo this percentage was 27% in 2010 (Statistics Norway, 2011).

The present study uses immigrant samples drawn in both Austria and Norway to improve the external validity of the findings. This is important because contextual variables like history of immigration or immigration policies which differ between Austria and Norway might also influence results. When considering external validity studies using comparative data are important.

The Present Study

The main goal of the present study was to compare the overall involvement in aggressive behaviour and bullying others and their underlying motives between non-immigrant and immigrant youth living in Austria and Norway. As underlying motives, reactive aggression and the need for affiliation or acceptance were distinguished.

Regarding the level differences it was impossible to draw conclusive hypotheses based on theoretical grounds. Moreover, because previous studies reported inconsistent results in Norway, while no associations were found between aggressive behaviour and immigrant status in Austria, we investigated this question exploratively.

Obviously it is very important to investigate mean level differences between non-immigrant and immigrant adolescents. However, such a descriptive approach can only be seen as a first step. Another important question which needs to be addressed is whether underlying motives for aggressive behaviour and bullying others might differ between non-immigrant and immigrant youth. Therefore, it was investi-

gated whether the need for peer acceptance and affiliation as important underlying motive for bullying others and aggressive behaviour operates differently between non-immigrant and immigrant youth. In line with basic predictions of the acculturation model (Berry, 1997; 2006), empirical evidence on peer rejection among immigrants (e.g., Motti-Stefanidi et al., 2008; Strohmeier & Spiel, 2003; Strohmeier et al., 2011) and resource control theory (Hawley, 1999; Pellegrini, 2008) the hypothesis was that the need for affiliation and acceptance would be a more important predictor for bullying others and aggressive behaviour among first generation immigrant youth compared with non-immigrant youth. This was because first generation immigrants who migrated themselves and who experienced resettlement were expected to be more vulnerable regarding their peer relations compared to non-immigrants. Generally speaking, we assumed that the need to be affiliated with or accepted by peers is related with the acculturative process and aggressive behaviour might be one negative strategy to achieve such affiliation goals among first generation immigrant youth.

Furthermore, we also expected differences regarding the predictive power of reactive aggression between bullying others and aggressive behaviour. While reactive aggression should be strongly related with aggressive behaviour, only small associations should be found between reactive aggression and bullying others. Because bullying others is defined as a proactive subtype of aggressive behaviour, and aggressive behaviour is defined as the broader construct consisting of both reactive and proactive components, these patterns should appear both among non-immigrant and immigrant youth.

Method

Procedure

In Austria and Norway, participation was voluntary and based on written parental consent. In Austria, data were collected in grade 9 classes of ten different schools and 49 classes located in the capital city of Austria, Vienna. In Norway, a sub-sample of a national representative study conducted in secondary schools (grade 8, 9 and 10) was

used. In Austria, 90% and in Norway 82% of eligible students participated in the study.

Participants

In Austria and Norway, non-immigrant and first generation immigrant youth were differentiated. In Austria, adolescents were asked in which country (a) they were born; and (b) their mother and (c) their father were born. In Norway, youth were asked (a) where they are from and (b) in which country they were born. In Austria, students whose mother and father were born abroad, and who were themselves born abroad were classified as *first generation immigrants* (N = 126). The students whose mother and father were born in Austria, and who were themselves born in Austria were classified as *non-immigrant Austrians* (N = 339). All other youth were excluded from the present study, namely 175 second generation immigrant youth and 119 youth with mixed heritage parents (one born in Austria, one born abroad).

In Norway, students who wrote down a country other than Norway in the statement "I'm from..." and who were born in another country than Norway were classified as *first generation immigrants* (N = 161). Youth who wrote down Norway in the statement "I'm from..." and who were born in Norway were classified as non-immigrant Norwegian (N = 3130). For the purpose of the present study, ten percent of the original number of non-immigrant Norwegian youth who participated in the national representative study were randomly selected (N = 302). Second generation immigrant youth (N = 55) and Norwegians born abroad (N = 85) were excluded from this study.

Sample Description

In Austria and Norway, the immigrant samples were highly diverse regarding their first languages and country of birth. In Austria, only 18% of the immigrants nominated German as their first language. The remaining 82% nominated more than 30 different languages as their mother tongues. In Norway, the immigrant students stemmed from more than 50 different countries of origin. Table 1 displays the demographic attributes of the Austrian and Norwegian study participants.

Table 1. Sample Description.

Country	Austria				Norway					
	<i>Non-immigrant Austrians</i> N=339		<i>1st Generation</i> N=126		<i>Non-immigrant Norwegians</i> N=302			<i>1st Generation</i> N=161		
Immigrant Groups	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS		
Gender	51.6%	48.4%	48.4%	51.6%	48.7%	51.3%	51.6%	48.4%		
Age / Grade	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	8 th	9 th	10 th	8 th	9 th	10 th
	15.49	0.89	16.03	0.98	37.4%	33.1%	29.5%	35.4%	32.3%	32.3%
Duration of stay (in years)			<i>M</i>	<i>SD</i>				<i>M</i>	<i>SD</i>	
			8.40	4.95				8.98	3.93	

In both Austria and Norway, no significant differences between immigrants and non-immigrants were found concerning gender distribution; however in Austria first generation immigrants were older, $T(463) = -5.54, p < .01$, compared with non-immigrant Austrians. This age difference reflects the common school policy in Austria where first generation immigrant youth are not allowed to pass to higher grades when their achievement is not sufficient. In Norway, non-immigrant Norwegian and immigrant youth were equally distributed between the grades 8, 9 and 10 (see Table 1).

Measures

Both in Austria and in Norway the present study was part of larger cross sectional studies of students' social and emotional problems. For the present analyses, three self-report scales were used in both the Austrian and the Norwegian sample.

Aggressive behaviour or bullying others. In Austria, the broader construct of aggressive behaviour was measured with the "pure overt aggression scale" originally developed by Little, Jones, Henrich and Hawley (2003) and replicated by Fite, Stauffacher, Ostrov and Colder (2008). The response format of this scale ranged from 0 (not at all true) to 3 (very true). The scale consisted of 6 items:

1. I am somebody who often quarrels with others.
2. I am somebody who often hurts others.
3. I am somebody who often hits, kicks, or punches others.
4. I am somebody who often puts others down.
5. I am somebody who often says mean things to others.
6. I am somebody who often threatens others.

The reliability of this scale was $\alpha = 0.78$ for the whole sample, $\alpha = 0.70$ for the non-immigrant sample and $\alpha = 0.78$ for the immigrant sample.

In Norway, a subcategory of aggressive behaviour, namely bullying others was measured with a scale originally developed by Roland (1999). Before these items were presented to the students, a standard definition of bullying was given in the questionnaire: We call it bullying or hassling when one or more students (together) are unfriendly or unpleasant to a student that cannot defend him- or herself easily. This could include *kicking, hitting, or shoving* the student. It is also bullying when students are *teased* or when students are *shut out* from the others. The answer options of this scale were "never", "now and then", "weekly" and "daily", which were scored 0, 1, 2 and 3 respectively. The scale consisted of four items:

This school year how often have you:

1. Bullied/hassled other students at school?
2. Bullied/hassled other students at school by teasing them?
3. Bullied/hassled other pupils at school by isolating them or shutting them out from others?

4. Bullied/hassled other pupils at school by hitting, kicking or shoving them?

The reliability of this scale was $\alpha = 0.74$ for the whole sample, $\alpha = 0.64$ for the non-immigrant sample and $\alpha = 0.82$ for the immigrant sample.

Reactive aggression. In Austria, the "reactive overt aggression scale" originally developed by Little and colleagues (2003) was used. The response format of this scale ranged from 0 (not at all true) to 3 (very true). The scale consisted of 6 items:

1. When I am hurt by someone I often start quarrelling.
2. If others make me angry or upset I often hurt them.
3. If others have angered me I often hit, kick or punch them.
4. If others make me upset or hurt me I often put them down.
5. When I am hurt by others, I often get back at them by saying mean things to them.
6. When I am threatened by someone, I often threaten back.

The reliability of this scale was $\alpha = 0.82$ for the whole sample, $\alpha = 0.76$ for the non-immigrant sample and $\alpha = 0.84$ for the immigrant sample.

In Norway, reactive aggression was measured with a scale originally developed by Roland and Idsøe (2001) and consisted of six items. The answer options were "NO", "no", "yes" and "YES" which were scored 0, 1, 2 and 3 respectively.

1. I get angry easily.
2. Sometimes I get so angry that I don't know what I'm doing.
3. If a teacher criticizes me, I get angry.
4. If a teacher has promised me that we are going to do something fun, but changes his/her mind, I protest strongly.
5. If I don't get my way, I get angry.
6. If I lose when playing a game, I get angry.

The reliability of this scale was $\alpha = 0.74$ for the whole sample, $\alpha = 0.70$ for the non-immigrant sample and $\alpha = 0.78$ for the immigrant sample.

Affiliation or acceptance by friends as goal. In Austria, a specified version of the instrumental overt aggression scale originally developed by Little and colleagues (2003) was used. The response format of this scale ranged from 0 (not at all true) to 3 (very true). The scale consisted of 6 items:

1. To be accepted by my friends, I often start quarrelling.
2. To be accepted by my friends, I often hurt others.
3. To be accepted by my friends, I often hit, kick, or punch others.
4. To be accepted by my friends, I often put others down.
5. To be accepted by my friends, I often say mean things to others.
6. To be accepted by my friends, I often threaten others.

The reliability of this scale was $\alpha = 0.83$ for the whole sample, $\alpha = 0.76$ for the non-immigrant sample and $\alpha = 0.78$ for the immigrant sample.

In Norway, the affiliation-related proactive aggression scale originally developed by Roland and Idsøe (2001) included four items. The answer options were “disagree very much”, “disagree a bit”, “agree a bit” and “agree very much” which were scored 0, 1, 2 and 3 respectively.

1. I go along with things that are wrong, to be in with others.
2. I feel that we become friends when we shut someone out.
3. I feel that we become friends when we tease someone.
4. I feel that we become friends when we do something illegal together.

The reliability of this scale was $\alpha = 0.87$ for the whole sample, $\alpha = 0.87$ for the non-immigrant sample and $\alpha = 0.88$ for the immigrant sample.

Results

Mean Level Differences between Non-immigrant and Immigrant Youth in the two Countries

In Austria, a 2 x 2 MANOVA with gender and immigrant status as factors was conducted. Application of multivariate tests using Pillais Criterion revealed a significant main effect on *gender*, $F(3,461) = 9.42, p < .001, \eta^2 = .06$. The variable *immigrant status*, $F(3,461) = 2.40, p = .07$, and the interaction effect *immigrant status* x *gender* were not significant, $F(3,461) = 2.06, p = .10$. Follow-up univariate tests revealed main effects on *gender* in all three scales. Boys scored higher in all scales compared to girls.

Table 2. Mean Level Differences between Non-immigrant and Immigrant Youth in the two Countries.

Immigrant Groups	Austria				F	Norway				F
	Non-immigrant Austrians N=339		1st Generation N=126			Non-immigrant Norwegians N=302		1st Generation N=161		
	M	SD	M	SD		M	SD	M	SD	
Aggressive Behaviour or Bullying Others	0.25	0.31	0.25	0.35	0.03	0.37	0.43	0.46	0.59	4.50*
Reactive Aggressiveness	0.56	0.46	0.65	0.60	2.66	1.34	0.56	1.44	0.68	3.37
Need for Affiliation or Acceptance	0.08	0.22	0.12	0.30	1.82	0.48	0.59	0.48	0.67	0.26

Note. * $p < .05$. The scales represent sum scores, and they ranged between 0 to 3.

In Norway, a 2x2 MANOVA was conducted. Application of multivariate tests using Pillais Criterion revealed significant effects on *gender*, $F(3,447) = 12.81, p < .001, \eta^2 = .08$, and *immigrant status*, $F(3,447) = 3.45, p = .05, \eta^2 = .02$. The interaction effect was not significant, $F(3,447) = 0.87, p = .46$. Follow-up univariate tests revealed main effects of gender on all scales indicating that boys had higher scores on all scales compared with girls. According to univariate tests, differences between non-immigrant Norwegian and immigrant adolescents were found in bullying others indicating higher scores in immigrants compared with non-immigrant Norwegians (see Table 2). No significant differences were found in the other two scales between non-immigrant Norwegians and immigrants.

Predicting Aggressive Behaviour and Bullying Others

A series of structural equation models were calculated using Mplus 5.0 (Muthen & Muthen, 2007) separately for the Austrian and the Norwegian samples. In the first step, the hypothesized associations were investigated using the whole sample. In the second step, a two group structural equation model (non-immigrants / immigrants) was applied imposing strong measurement invariance (factor loadings and intercepts equal between non-immigrants and immigrants).

Maximum likelihood estimation using the MLR estimator of Mplus was implemented providing standard errors and test statistics that are robust to non-normality of the data and to non-independence of observations. In addition, we controlled for the nested data structure on class level (ICCs of all variables were $< .05$). Three criteria were used in evaluating the model fit: the chi-square test, the Comparative Fit Index (CFI; Bentler, 1990), and the root mean squared error of approximation (RMSEA; Steiger, 1990). To yield an ideal just identifiable measurement structure of three indicators for each construct (Little, 1997), we parcelled the items by randomly averaging two items. Parcels are preferred for the consecutive analyses because, compared with items, parcels have superior psychometric quality that reduce both Type I and Type II sources of error but do not bias or otherwise inflate construct relations (for details see Little, 1997). Because the χ^2 difference test can not be used for the MLR estimator for model comparisons, the Satorra-Bentler test (Asparouhov & Muthen, 2010) was applied.

Step 1: Whole sample SEM models.

In Austria, the whole sample structural equation model had an excellent fit, $\chi^2(24) = 107.41, p < .01, CFI = 0.96, RMSEA = 0.07$. In line with the expectations, we found significant coefficients between the two predictors, reactive ag-

gression ($\beta = .53, p < .01$) and the need for acceptance ($\beta = .51, p < .01$) and aggressive behaviour. Moreover, the two predictors reactive aggression and the need for acceptance were significantly associated ($r = .53, p < .01$). This model explained a substantial amount of variance in aggressive behaviour ($R^2 = .83$). Similar high levels of explained variance were also found by Fite and colleagues (2008) who reanalyzed the items developed by Little and colleagues (2003) in the same way. This high amount of explained variance points to the conceptual overlap of the measurements. As explained by Little et al., (2003) the items used disentangle forms and functions of aggression because the items always contain the same aggressive behaviour. Therefore, it is reasonable that the explained variance between the constructs is high.

In Norway, the whole sample structural equation model had an excellent fit, $\chi^2(41) = 56.03, p = .06, CFI = 0.99, RMSEA = 0.03$. In line with the expectations, we found a significant association between the predictor need for affiliation ($\beta = .51, p < .01$) and bullying others, while reactive aggression did not predict bullying others ($\beta = .14, p = .10$). The two predictors reactive aggression and need for affiliation were significantly associated ($r = .47, p < .01$). This model explained a substantial amount of variance in bullying others ($R^2 = .29$).

Step 2: Two group (non-immigrants / immigrants) SEM models.

In Austria, the two group structural equation model imposing strict measurement invariance had an excellent fit, $\chi^2(60) = 103.52, p < .01, CFI = 0.96, RMSEA = 0.06$. The inspection of the associations between the two predictors and aggressive behaviour revealed striking differences between non-immigrants and immigrants (see Figure 1). In non-immigrant youth, reactive aggression ($\beta = .61, p < .01$) was stronger associated with aggressive behaviour compared with the need for acceptance ($\beta = .39, p < .01$). In immigrant youth, the pattern of results was exactly reversed, the need for acceptance ($\beta = .80, p < .01$) was stronger associated with aggressive behaviour compared with reactive aggression ($\beta = .27, p < .01$). In both groups, the two predictors were equally strong associated ($r = .55$ for non-immigrant and $r = .54$ for immigrant youth). In both groups, a substantial amount of variance was explained ($R^2 = .78$ for non-immigrant and $R^2 = .94$ for immigrant youth). These differences were statistically significant, because the model fit decreased when the two predictors were constrained to be equal between non-immigrants and immigrants compared with the model in which the two predictors were allowed to differ between the two groups. In line with the results of the MANOVAs, the latent means of bullying others were different between non-immigrant and immigrant youth ($p = .03$) indicating higher levels among immigrant youth. The latent means of reactive aggression ($p = .26$) and affiliation as goal ($p = .96$) did not differ between the two groups.

In Norway, the two group structural equation model imposing strict measurement invariance had an excellent fit, $\chi^2(98) = 99.51, p = .43, CFI = 0.99, RMSEA = 0.01$. The inspection of the associations between the two predictors and aggressive behaviour revealed striking differences between

non-immigrants and immigrants (see Figure 2). In non-immigrant youth, both reactive aggression ($\beta = .32, p < .01$) and the need for affiliation ($\beta = .42, p < .01$) predicted bullying others. In immigrant youth, however, the need for affiliation ($\beta = .54, p < .01$), but not reactive aggression ($\beta = .08, p = .57$) predicted bullying others. In both groups, the two

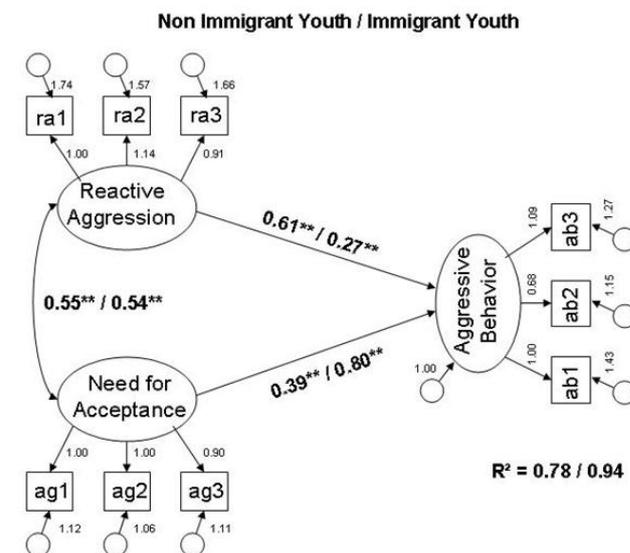


Figure 1. Multiple group structural equation models separately for immigrant and non-immigrant youth living in Austria. For factor loadings and intercepts (freely estimated but constraint to be equal between groups) the unstandardized regression weights are displayed. For the associations between reactive aggression, need for acceptance and aggressive behaviour the standardized regression weights are displayed. Parcelled indicators were used: ra1, ra2, ra3 = parcelled indicators for reactive aggression; ra1 = (item1 + item5)/2; ra2 = (item2 + item4)/2; ra3 = (item6 + item3)/2; ag1, ag2, ag3 = parcelled indicators for need for acceptance; ag1 = (item1 + item2)/2; ag2 = (item6+item5)/2; ag3 = item3+item4)/2; ab1, ab2, ab3 = parcelled indicators for aggressive behaviour; ab1 = (item1+item4)/2; ab2 = (item2+item3)/2; ab3 = (item5+item6)/2.

predictors were equally strong associated ($r = .41$ for non-immigrant and $r = .55$ for immigrant youth). In both groups, a substantial amount of variance was explained ($R^2 = .39$ for non-immigrant and $R^2 = .25$ for immigrant youth). These differences were statistically significant, because the model fit decreased when the two predictors were constrained to be equal between non-immigrants and immigrants compared with the model in which the two predictors were allowed to differ between the two groups. In line with the results of the MANOVAs, the latent means of bullying others were different between non-immigrant and immigrant youth ($p = .03$) indicating higher levels among immigrant youth. The latent means of reactive aggression ($p = .26$) and affiliation as goal ($p = .96$) did not differ between the two groups.

Discussion

The purpose of this study was twofold: First, the levels of bullying others and aggressive behaviour among non-immigrant and immigrant adolescents in two European countries, Austria and Norway, were explored. Second, differences in the underlying motives of aggressive behaviour and bullying others separately for non-immigrant and the immigrant youth were investigated.

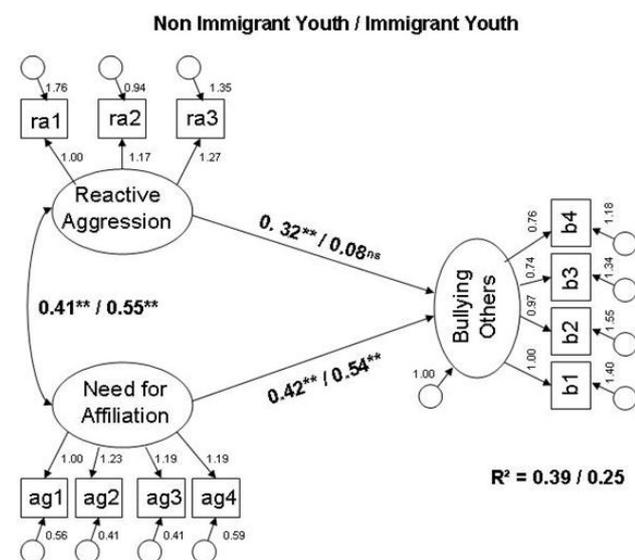


Figure 2. Multiple group structural equation models separately for immigrant and non-immigrant youth living in Norway. For factor loadings and intercepts (freely estimated but constrained to be equal between groups) the unstandardized regression weights are displayed. For the associations between reactive aggression, need for affiliation and bullying others the standardized regression weights are displayed. Parcelled indicators were used for reactive aggression: ra1 = (item1 + item4)/2; ra2 = (item2 + item6)/2; ra3 = (item3 + item5)/2.

The present study made a main discovery: Underlying motives of aggressive behaviour and bullying others are different between non-immigrant and immigrant youth. First, regarding reactive aggression, the association with aggressive behaviour/bullying others was stronger among non-immigrants compared to immigrants. The generally stronger association between reactive aggression and aggressive behaviour (in both groups) in Austria compared to Norway is probably related to the fact that in Austria the broader concept of aggressive behaviour was measured. It is well known in the literature that the main motive for bullying others is instrumental but not reactive aggression (e.g., Roland & Idsøe, 2001). Second, but even more interesting, in both Austria and Norway, the analyses revealed that the need for affiliation or acceptance was a stronger motive for immigrant youth compared with non-immigrant youth. Despite of the fact that in Austria and Norway different constructs were measured (e.g., the internal validity was low) the patterns of results were the same (e.g., the external validity was

high). This consistency of results is remarkable as the two countries differ regarding many aspects, like their history of bullying prevention in schools, their history of immigration, as well as regarding the number and composition of immigrant living in the two countries. Thus, the present study demonstrated high external validity of the present results and significantly adds to the existing literature. No consistent results were found regarding level differences. While in Austria immigrant status did not moderate any of the aggression constructs, in Norway only small differences were found between non-immigrant and immigrant youth regarding bullying others. Thus, it seems that immigrant status, in and of itself, is not a risk factor regarding levels differences for aggressive behaviour and underlying motives (see also, e.g., Graham, Taylor & Ho, 2009).

The need for affiliation as a motive to bully or hurt others

Although both status and affiliation goals are distinguished in the literature dealing with children's social goals (Buhrmester, 1996; Ojanen et al., 2007; Ojanen et al., 2005), studies which explicitly investigated the impact of affiliation goals on aggressive behaviour are still scarce (exceptions are, e.g., Fandrem et al., 2009; Roland & Idsøe, 2001). To gain power over another person is the goal most often investigated in aggression research (Card & Little, 2006). According to resource control theory, youth can achieve such affiliation needs by prosocial or antisocial means (e.g., Hawley, 1999; 2003; Pellegrini, 2008).

In line with basic predictions of the acculturation model (Berry, 1997; 2006), empirical evidence on peer rejection among immigrants (e.g., Motti-Stefanidi et al., 2008; Strohmeier & Spiel, 2003; Strohmeier et al., 2011) and resource control theory (Hawley, 1999; Pellegrini, 2008) it was demonstrated the need for affiliation and acceptance is a more important predictor for bullying others and aggressive behaviour among immigrant youth compared with non-immigrant youth. In line with acculturation models (Berry, 1997, 2006) it was argued that the need for affiliation or acceptance are particular challenges for immigrant youth, who are also acculturating (Berry et al., 2006; Oppedal, 2006). Generally speaking, the present study demonstrated that the application of acculturative models (Berry, 1997, 2006) on important concepts of peer relation research like motives for aggressive behaviour or bullying others is very useful.

Practical Implications

To know underlying motives of aggressive behaviour and bullying others is important for both prevention and intervention. By knowing that immigrant youth hurt and bully their peers mainly because they want to feel affiliated with other aggressors or to be accepted by peers, it is possible to tailor prevention and intervention efforts. To prevent aggressive behaviour among immigrant youth, teachers need to

consider alternative ways for them to feel affiliated with others. Teachers could facilitate a class atmosphere where immigrants feel accepted and liked by others because of common goals or common successes in achievement situations. To intervene effectively in bullying situations it is crucial that teachers are aware of group dynamics and friendship networks. If the goal to be accepted by friends is an important underlying mechanism for aggressive behaviour, interventions which change group norms are likely to be most successful on the long run.

Limitations

Data were collected via self assessments which can be considered as a limitation of the present research. Although self assessments are considered to be a reliable source of information by many researchers (Little et al., 2003; Pellegrini & Bartini, 2000; Roland & Idsøe, 2001; Solberg & Olweus, 2003), aggressive behaviour and bullying others are likely to be systematically underestimated because perpetrators might

be reluctant to identify themselves (Smith & Sharp, 1994). Because we were interested to investigate underlying motives of aggressive behaviour rather than estimating prevalence rates, we consider applying self assessments as suitable for our purpose.

The present study solely relied on cross sectional data which is a limitation of the present approach. Although we modelled directions of associations based on good theoretical reasons, longitudinal data would have provided more rigorous evidence to infer causal directions implied in the models.

In Austria and Norway neither exactly the same constructs were measured, nor was exactly the same sampling procedure applied. While in Norway bullying others was investigated, in Austria the broader construct of aggressive behaviour was examined. Thus, the internal validity of the present study is low. Nevertheless, similar results were obtained in the two countries indicating high external validity of the present findings.

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(Article received: 2-5-2011; reviewed: 27-4-2012; accepted: 15-5-2012)