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**Perceptual Discrepancy Profiles of Social Competence and Their Interrelations with
Depressive Symptoms among Finnish Adolescents**

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Abstract

We examined the perceptual discrepancy profiles between self- and others' (peer, teacher) evaluations of adolescents' social competence (SC) and the interrelations of these profiles with self-reported depressive symptoms. The participants were 390 Finnish lower secondary school students. Latent profile analysis (LPA) revealed five classes of discrepancy profiles; adolescents with congruent perceptions, quite congruent perceptions, and positively discrepant perceptions of SC reported lower depressive symptoms, whereas those with negatively and extremely positively discrepant perceptions of SC reported the highest number of depressive symptoms. The larger the discrepancy between the self- and others' evaluations of SC were, the more depressive symptoms were reported. The results indicate that interventions designed to mitigate depression cannot be unilateral but need to be tailored to individual needs.

Keywords: social competence, depressive symptoms, latent profile analysis (LPA), perceptual discrepancies, biased perceptions

GSS: This study suggests that the capacity to maintain close contact with reality and slightly positively biased perceptions of SC is associated with psychological well-being while large discrepancies between the self- and others' views of SC are linked with depressive symptoms.

The views of adolescents on their own social competence (SC) play an important role in their psychosocial adjustment. Positive perceptions of the self are a sign of mental health,

(Taylor & Brown, 1988), whereas negative perceptions of the self are associated with depressive symptoms (Uhrlass, Schofield, Coles, & Gibb, 2009). From this view, an overly positive perception may be beneficial to adolescents' well-being regardless of how others view them. This hypothesis is important, as research suggests that the perceptions of young people on their SC are not always in line with those of others (Bédard, Bouffard, & Pansu 2014). Several studies have shown a discrepancy between children and adolescents' own perceptions of their social performance and those of others (Brendgen, Little & Krappmann, 2000; Brendgen et al., 2004). This discrepancy is quite common among young children, but as they mature, these views begin to be more congruent with those of their peers, albeit many continue to overestimate their SC (Harter, 1990). Biased self-perceptions whether negatively or positively, serve to influence early adolescents' feelings of depression. Positively biased self-evaluations have been found to be related negatively to depressive symptoms and conversely, negatively biased evaluations have been associated positively with depressive symptoms (Bédard, Bouffard, & Pansu, 2014). To date, most of the studies that examined how discrepant views between self and others are associated with depressive symptoms have used correlational and regression-based analysis. This study aims to examine the distinct profiles of discrepant views between the self, peers and teacher regarding SC using a person-centered approach in contrast with variable-centered methods. In addition, this study investigated the relationship of these profiles with depressive symptoms among early adolescents. This research will reveal important information about individuals at risk of developing depression and enhance our understanding of how discrepancies in evaluations of adolescents' SC can be important information in regard to their mental health.

Literature Review

Social competence. SC has been described as the ability to effectively make and maintain positive social outcomes by organising one's own personal and environmental

resources (e.g. Anderson-Butcher, Iachini, & Amorose, 2008). It has also been contextualised as the ability to collaborate, empathise and prohibit disruptive impulses in school contexts (Junttila, 2010; Junttila, Voeten, Kaukiainen, & Vauras, 2006). Sheridan and Walker (1999) highlighted two important aspects of social skilfulness. One is the ability to learn a variety of important social skills that are appropriate in different contexts, and the other is the ability to learn to relate and behave in a way that is acceptable to other people. The distinction between social skills and the acceptability of social behaviour implies the bi-dimensional nature of SC, that is, the manifestation of pro-social skills and the absence of anti-social behaviour. Socially competent individuals exhibit socially desirable behaviours, such as co-operating skills (cooperating and participating in peer activities); empathy (helping, sharing with and comforting others); and refrain from anti-social behaviours, such as impulsive (acting by emotional impulses) and disruptive behaviour (arguing and quarrelling with peers). Numerous studies have established strong associations between deficits in SC and increased depressive symptoms (Burt, Obradović, Long, & Masten, 2008; Corredor et al., 2017).

Depressive symptoms. Early adolescence is characterised by emotional and mood disturbances, and many adolescents report depressive symptoms including feelings of sadness, pessimism, sense of failure, dissatisfaction, guilt, self-dislike, self-harm, social withdrawal, indecisiveness, self-image dissatisfaction, sleeping problems, fatigability, anorexia, and anxiety. For some adolescents, these symptoms can be intense or persistent, and may even evolve into the clinical form of depression. Among children, the prevalence rate is low (less than 1% in most studies) and no gender differences have been found (Kessler et al., 2001). However, depression increases considerably (up to 4%–5%) throughout adolescence (Costello, Erkanli, & Angold, 2006). Buttigieg et al. (2015) suggested that puberty may increase depressive symptoms in those already experiencing moderate levels of depression and research studies have shown the detrimental effects of depression on adolescents including educational

outcomes (Kovacs & Goldston, 1991), poor interpersonal functioning (Hammen & Brennan, 2002), and suicide (Nock & Kazdin, 2002) as well as its comorbidity with other psychiatric disorders (Angold, Costello, & Erkanli, 1999).

Discrepancies Between Self-and Others Views of Social Competence and Their Links with Depressive Symptoms.

Evidence suggests that a positive perception of SC enhances resilience (Childs, Schneider, & Dula, 2001) and facilitates mental health (Chen et al., 2002). In a short-term longitudinal design, Brendgen et al. (2004) found that among students from the fourth to sixth grades, an overestimation of SC with the peer group and an overestimation of friendship quality were both related to a decrease in children's depressive feelings. Additionally, the participants' positive illusions about their social functioning were related to an increase in peer-rated social preference (Brendgen et al., 2004). In a study of 544 adolescents aged 15, Bédard, Bouffard, & Pansu (2014) found that positively biased perceptions of SC served to decrease depressive symptoms. n (These findings support the assumption that positively biased perceptions of one's SC may protect against depressive symptoms.

Other researchers have challenged the view that favourable perceptions of SC have a positive impact on mental health. McGrath and Repetti (2002) found no evidence that positive SC perceptions affect students' developmental adjustment. Hughes, Cavell and Prasad-Gaur (2001) found evidence of the negative effects of the overestimation of SC. Their study showed that aggressive children who had positively biased perceptions of their SC were less liked by their peers 30 months later than were aggressive children with more realistic and moderate views on their SC. The proponents of this view assert that a positively biased perception of SC may also have negative consequences on one's mental health (Taylor & Brown, 1994).

Adolescents who feel that they are not accepted despite positive feedback from peers, experience negative outcomes. Longitudinal studies that lend support to this proposition

have shown that children and adolescents who reported lower competence also reported depressive symptoms 6–12 months later (DuBois, Felner, Bartels, & Silverman, 1995). In a study of 280 adolescents aged 17-21 Uhrlaas et al. (2009) found that negatively perceived competence served to increase depressive symptoms. Cole et al. (1997) found among 702 elementary school students that negatively self-perceived competence predicted increases in self-reported depression over time. Conversely, Qian, Wang, & Chen (2002) found that adolescents who reported more depressive symptoms held unrealistically negative views of the self and tended to underestimate their social skills and social acceptance, whereas non-depressed individuals' social self-evaluations appeared relatively accurate .

The research studies reviewed above have identified different groups of how individuals perceive themselves differently compared to how others view them including a) those who perceived themselves more positively than others viewed them (overestimation, overly positive, positive illusions etc.), b) those who perceived themselves extremely positively relative to others' evaluations (extreme overestimations, excessively optimistic, extremely positive illusions etc.), c) those who perceived themselves more negatively than others' evaluated them (underestimation, unrealistically negative, negative illusions etc.) and d) those who perceived themselves similarly with how others evaluated them (realistic, accurate, in agreement to others etc.).

Why there can be discrepancies between self-views and those of others?

A considerable number of studies have investigated the ways people judge themselves based on the outcomes of their performance. Individuals tend to view positive outcomes as inherent to internal factors such as their traits or abilities and undesired outcomes to external factors such as luck, circumstances, others' responsibility etc. This tendency has been referred to as self-protective attributional bias (Miller & Ross, 1975). This asymmetry in the attributions people make for their personal outcomes reflects a drive to protect self-esteem from ego-

threatening information and might explain why in many cases people perceive themselves very differently than how others view them (Shepperd, Malone & Sweeny, 2008).

Cognition and motivation play a vital role in the existence of self-protective bias (Shepperd, Malone & Sweeny, 2008). Cognitive-driven factors such as self-schema (Taylor & Brown, 1988) and performance expectancies (Campbell & Sedikides, 1999) influence the self-judgments people make regarding their performance and individuals are motivated to protect one's own sense of self-esteem (Snyder, Stephan, & Rosenfield, 1976). The motivation to sustain self-esteem might make people consider themselves as more competent in different domains than others see them. For instance, when judging their SC it is plausible that people might show self-protective bias by attributing the positive outcomes of their social performance to internal causes and evaluate themselves as more prosocial than others view them while attributing their negative outcomes such as quarrelling to external causes.

Although review studies (see Shepperd, Malone & Sweeny, 2008) have shown that positive self-schema, positive performance expectancies and the motivation to sustain self-esteem trigger self-protective bias, this is not always the case. Research has shown that people who are depressed or dysphoric possess a different attributional style, called depressive attributional style (Abramson et al., 2002). People with a depressive attributional style are likely to show attenuated self-protective bias due to substantial differences in motivation and cognition (Tennen & Hertzberger, 1987). In terms of motivation, they suffer from a breakdown in their effort to sustain self-esteem (Abramson & Alloy, 1981). In terms of cognition, they tend to expect poor outcomes from their performance (Tennen & Hertzberger, 1987) and possess negative self-views (Mezulis, et al., 2004). The negative self-views make them reject positive feedback in favour of negative feedback because the latter is more consistent with their negative self-view (Swann, 1990).

Research looking into the gender differences in self-protective attributional bias has shown that there are no statistically significant differences between the genders (for a review see Mezulis et al., 2004). However, males often differ from females as they age in the development trajectories for self-protective attributional bias. In addition, males show a relatively stable self-protective bias from childhood to adulthood while females show a significant decline in the self-protective bias with age (for a review see Mezulis et al., 2004).

Rationale & aims of the study

Depression has a long-term impact on adolescents' psychosocial functioning and quality of life. The literature indicates that the perceptions of adolescents on their own social performance in comparison with how others view them are associated variously with mental health. While research suggests that negatively discrepant self-perceptions of SC are linked with increased depressive symptoms, it remains unclear how positively discrepant self-perceptions of SC are linked with depressive symptoms. Past research on the topic has relied on variable-centered approaches, that is, statistical techniques that describe associations between variables. Person-centered analyses, by contrast, identify groups of individuals who are more similar to each other on particular attributes or relations among attributes than individuals from different groups (Laursen & Hoff, 2006). Adopting a person-centered approach allows us to examine the profiles of perceptual discrepancy on one's SC that are prevalent among the adolescents of the study and how there are associated with depressive symptoms. If perceptual discrepancy profiles of SC are associated differently with depressive symptoms, such information should guide accordingly prevention and intervention purposes.

The first aim of this study was to identify different subgroups (latent classes) of early adolescents' SC profiles in relation to the discrepancies between self-peer and self-teacher evaluations using latent profile analyses (LPA) and also examine gender differences relative to these profiles. The second aim of the study was to examine how these sub-groups relate to

depressive symptoms. A number of hypotheses were proposed to explain these aims based on the literature on self-protective attributions (Mezulis, Abramson, Hyde, & Hankin, 2004; Shepperd, Malone & Sweeny, 2008). In regard with the first aim, it was hypothesized that some groups might show large discrepancies between self- and others' evaluations, either evaluating their SC more negatively than their teachers and peers or viewing their SC more positively than the other evaluators, whereas other groups might show very small discrepancies (close to zero) thus, evaluating themselves similarly with how their teachers and peers have evaluated them. We expected to find at least four latent classes characterized by (a) positive perceptual discrepancies of their SC; (b) negative perceptual discrepancies of their SC; (c) congruent perceptions of their SC and (d) extremely positively discrepant perceptions of their SC. Moreover, we expected to find no statistically significant gender differences relative to the latent classes. In terms of our second aim, we hypothesized that (a) adolescents in classes characterized by positive perceptual discrepancies would report low number of depressive symptoms; (b) adolescents in classes with negative perceptual discrepancies were expected to report high number of depressive symptoms; (c) adolescents whose views of their SC were more congruent with how their teachers and peers evaluated them were expected to report low number of depressive symptoms; (d) adolescents in classes with extremely positive perceptions were expected to report high number of depressive symptoms.

Method

Participants

The data used in this study are a part of a research project focusing on the socio-emotional well-being of Finnish school students. The target groups of the study were two consecutive age cohorts of first-graders of lower secondary school (13-year-olds). The number of participants was altogether 458 of whom 390 participated in the study. The number of girls was 191 (49%) and 199 boys (51%). (The participants attended mainstream education schools in a

municipality of Southwestern Finland and thus representing the general population because almost all adolescents attend compulsory education in Finland. Both the students and their parents were asked to provide written consent allowing the students to participate in the study. The participants were informed that participation was voluntary and that they had the right to withdraw from the study at any time during the data collection process.

Measurements and Procedures

The main measurement scales used in this study were (1) the Multisource Assessment of Social Competence Scale (MASCS), which estimates the ratings of the adolescents' SC, as experienced by the adolescents themselves, their peers and their teacher, and the (2) Finnish modification of the 13-item Beck Depression Inventory (R-BDI), indicating adolescents' depressive symptoms. These scales are described in more detail below.

Social competence. Adolescents' SC was rated with the MASCS developed by Junttila et al. (2006). The scale consists of 15 items that load into four factors of SC. Two factors, co-operating skills (e.g. 'Effectively participates in group activities') and empathy (e.g. 'Is sensitive to the feelings of others'), assess the pro-social dimension of SC. The two other factors, impulsivity (e.g. 'Has a short fuse') and disruptiveness (e.g. 'Argues and quarrels with peers'), assess the anti-social dimension of the construct. The reliability estimates (Cronbach's alpha) for peer and teacher ratings were high, between .88 and .94, and for self-ratings, the estimates varied from .68 to .80 (see Junttila et al., 2006).

The rating scale is a four-point scale that indicates frequency as follows: 1=never, 2=rarely, 3=frequently and 4=very frequently. The items were rated by (a) the adolescents themselves, (b) their peers and (c) their teachers. With the exception of the difference in personal pronoun use (e.g. 'I have a short fuse' vs. 'Has a short fuse'), the items for the multiple evaluators are similar. The teacher who taught the most number of subjects in the class was invited to evaluate the students. The peer ratings were collected from every student in the class

and averaged to obtain one rating for each adolescent from his/her peers in the class. The self-, peer and teacher ratings of the adolescents' SC were collected during the fall semester of their first year in lower secondary school.

Depressive Symptoms. The Finnish modification of the 13-item R-BDI was used to assessing adolescent depressive symptoms. The scale is a short version of the BDI, which was translated into Finnish, modified and validated for the adolescent population (see Kaltiala-Heino, Rimpelä, Rantanen, & Laippala, 1999). The internal consistency of the depressive symptoms scale was good, with a Cronbach alpha of 0.84 for girls and 0.87 for boys (see Kaltiala-Heino et al., 1999). The scale consists of 13 items, including constructs that focus on sadness, pessimism, sense of failure and dissatisfaction (see Kaltiala-Heino et al., 1999, Appendix 1). Each of the items of the 13-item BDI consisted of five statements of increasing intensity of depressive emotions and cognitions, and an additional response alternative indicating a positive mood; the students had to choose the one that best described them (e.g. for sadness, the students had to choose from a) I feel good and positive, b) I do not feel sad, c) I feel sad or blue, d) I am blue or sad all the time, and I cannot snap out of it, or e) I am so sad or unhappy that I cannot stand it). The first two choices (a, and b) were coded as zero and the next ones (c, d, and e) were coded as 1, 2, and 3 respectively. Sum scores were used and the variation was between 0 and 39. Self-evaluations of depressive symptoms were collected during the fall semester of the students' first year in lower secondary school.

We collected the self- and peer ratings of the children's SC during a normal classroom lesson. The teachers were given the questionnaire in the same format as that used for the peer and self-ratings.

Statistical Analyses

The analyses were run in Mplus software, version 6.11 (Muthén & Muthén, 2010). Missing data (3.8%) were treated with the expectation-maximization method (McKnight,

McKnight, Sidani, & Figueredo, 2007). An important advantage of using this method to handle data is its desirable estimation properties when missing data are ignorable. The discrepancy scores between self and peer ratings, as well as self and teacher ratings, were calculated by subtracting the peer scores from the self-scores and the teacher scores from the self-scores. For each individual, the score obtained is the difference between the pair ratings for each of the four factors of SC (cooperating skills, empathy, impulsivity and disruptiveness). A value of 0 represents an absolute agreement between the evaluators of the students' SC. A negative value indicates that the person has underestimated his/her performance, whereas a positive value shows that the adolescent has overestimated his/her performance in either pro-social behaviour (cooperating skills and empathy) or anti-social behaviour (impulsivity and disruptiveness).

Next, LPA using the resultant discrepancy scores was performed to identify adolescents with similar patterns of perceived SC (i.e. a combination of their SC factors, namely, cooperating skills, empathy, impulsivity and disruptiveness). A model-based variant of traditional cluster analysis, LPA aims to find the unobserved subpopulations (latent classes) within the data (see Wang & Bodner, 2007). The differences between the LPA classes were studied using gender as a categorical (DCAT) and depressive symptoms as continuous (DCON) auxiliary variable.

The Fit Indexes

To compare the resultant latent profile classes, we used the log-likelihood (log L) value (where a higher number indicates a better fit), the Akaike information criterion (AIC) and the Bayesian information criterion (BIC). The AIC and BIC serve as the guide to choosing between competing statistical models, in which the smaller is the value of AIC and BIC, the more parsimonious it is (Akaike, 1987). Additionally, we used the entropy value (which varies between 0 and 1) because a value closer to 1 indicates a clearer classification and the probability that the estimates of cases belonging to each class (Wang & Bodner, 2007).

Results The descriptive statistics for the adolescents' self-, peer-, and teacher-evaluated SC and depressive symptoms are presented in Table 1. Because of the large number of study variables the descriptive statistics are presented as sum scores. The skewness and kurtosis of the sum scores for SC were within reasonable limits, that is, between -2.0 and 2.0 for skewness and between -7.0 and 7.0 for kurtosis (Curran, West, & Finch, 1996). Due to skewness and kurtosis values for Depressive symptoms, we adapted the nonparametric correlation test and maximum likelihood-robust (MLR) estimator for SEM analyses.

Table 1. Descriptive statistics for adolescents' depression factor and for adolescents' self-, peer-, and teacher-rated social competence (SC) factors

	Min	Max	Mean	SD	Skewness	Kurtosis
SC/self-ratings						
Cooperating skills	5,00	20,00	13,9960	2,82854	- 0,379	0,741
Empathy	3,00	12,00	9,0404	1,69450	- 0,684	1,626
Impulsivity	3,00	12,00	4,9785	1,89895	1,195	1,599
Disruptiveness	4,00	16,00	6,3847	2,16338	0,923	1,376
SC/ peer ratings						
Cooperating skills	6,15	17,20	12,7423	1,98411	- 0,454	0,018
Empathy	4,80	10,45	8,1216	1,05251	- 0,569	0,200
Impulsivity	3,26	9,68	4,8095	,98991	1,481	3,498
Disruptiveness	4,20	11,94	6,3685	1,42234	1,344	1,825
SC/ teacher ratings						
Cooperating skills	5,00	20,00	13,2066	3,20601	- 0,291	- 0,162
Empathy	4,00	12,00	8,9874	1,82107	- 0,218	- 0,345
Impulsivity	3,00	12,00	4,7953	1,79239	1,166	1,550
Disruptiveness	4,00	16,00	6,3082	2,67586	1,227	0,923
Depressiveness	- 0,01	22,00	1,3199	2,75677	3,504	15,291

Notes. SC, social competence.

The correlations between the variables cooperating skills (CO), empathy (EM), impulsivity (IM), disruptiveness (DI) of SC within and between raters (self, peers and teacher) and depressive symptoms are presented in Table 2. Most of the correlations between the variables (CO, EM, IM, DI) within and between evaluators (self, peers and teacher) and depressive symptoms were statistically significant but low in magnitude, indicating that the

three sources of information hold different views regarding the adolescents' SC. The few correlations that were not statistically significant were found mainly between the self- and others' evaluations (both peers and teacher). As can be seen from Table 2, the strongest correlations were found between peer and teacher ratings.

Table 2. Correlations between factors (cooperating skills, empathy, impulsivity, disruptiveness) of social competence within and between raters (self, peers, and teachers) and depression

	Self- evaluations of SC				Peer evaluations of SC				Teacher evaluations of SC				Depressiven
	CO	EM	IM	DI	CO	EM	IM	DI	CO	EM	IM	DI	ess
Self- evaluations of Social Competence													
Cooperating skills													
Empathy	,695**												
Impulsivity	,237**	,341**											
Disruptiveness	,196**	,325**	,637**										
Peer evaluations of Social Competence													
Cooperating skills	,411**	,297**	-,086	-,079									
Empathy	,316**	,304**	,138**	,140*	,898**								
Impulsivity	,123*	,234**	,265**	,219*	,446**	-,578**							
Disruptiveness	-,098	,186**	,141**	,259*	,501**	-,641**	,810**						
Teacher evaluations of Social Competence													
Cooperating skills	,272**	,170**	-,054	,007	,552**	,459**	-,314**	-					
Empathy	,174**	,169**	-,099	-,106	,454**	,438**	-,433**	-	,680**				
Impulsivity	-,092	-,201**	,217**	,204*	-,311**	-,422**	,595**	,603**	-,319**	-,581**			
Disruptiveness	-,015	-,152**	,119*	,200*	-,263**	-,403**	,524**	,663**	-,252**	-,523**	,757**		
Depressiveness	-,174**	-,209**	,147**	,045	-,169**	-,196**	,101*	,032	-,114*	-,084	,121*	,060	

Notes. SC, social competence; CO, cooperating skills; EM, empathy; IM, impulsivity; DI, disruptiveness.

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Latent Profiles of Discrepancies between Self–Peer and Self–Teacher Ratings of Adolescents' SC and Gender Differences

The first aim of this study was to identify the discrepancy profiles of adolescents' SC, as evaluated by the self-, peer- and teacher ratings. The discrepancy values of self (-) minus peers and self (-) minus teacher were calculated and then analysed using LPA.

Table 3. Model fit estimates, distinguishability estimates, and class proportions for the series of discrepancies between self- peer and self- teacher ratings of social competence latent profile analysis

	Log likelihood	AIC	BIC	Entropy	Class proportions	Average latent class posterior probabilities
SC discrepancies/ self-peer						
1 Class	-3222.247	6460.494	6491.910	1.000	1.000	1.000
2 Class	-3110.388	6254.777	6321.535	.663	.629/.370	.919/.869
3 Class	-3032.055	6116.110	6218.210	.776	.074/.608/.317	.911/.900/.886
4 Class	-2965.241	6000.482	6137.925	.803	.498/.304/.077/.012	.927/.862/.909/.868
5 Class	-2941.235	5970.471	6143.256	.807	.240/.464/.080/.184/.032	.819/.919/.895/.850/.924
SC discrepancies/ self-teacher						
1 Class	-3059.929	6135.858	6166.178	1.000	1.000	1.000
2 Class	-2967.282	5968.563	6032.993	.679	.718/.281	.923/.866
3 Class	-2910.397	5872.794	5971.333	.733	.070/.663/.266	.914/.885/.893
4 Class	-2876.574	5823.148	5955.767	.791	.073/.238/.623/.064	.883/.851/.910/.861
5 Class	-2847.961	5783.922	5950.680	.793	.070/.183/.223/.474/.048	.882/.861/.844/.883/.952

Notes. AIC, Akaike information criterion; BIC, Bayesian information criterion; SC, social competence.

The resultant log L, AIC, BIC and entropy estimates, as well as the class proportions and average latent class posterior probabilities for the consecutive number of classes (1, 2, 3, 4, 5 and 6), are presented in Table 3. To choose the optimal number of classes, we used the criterion to be guided with (1) the fit of the model (using log L, AIC and BIC), (2) the

distinguishability of the latent classes (using entropy and the average latent class posterior probabilities), (3) the latent class sizes (class proportions) and (4) the theoretical justification and interpretability of the latent classes (Muthén, 2003). With regard to the model for self-peers, the log L, AIC and entropy estimates preferred the six-class solution; however, the BIC and entropy estimates, the class proportions and the latent class posterior probabilities supported the five-class solution. For the self-teachers model, the log L and AIC estimates preferred the six-class solution; however, the BIC and entropy estimates, the class proportions and the latent class posterior probabilities supported the five-class solution. Based on the theoretical justification, the interpretability of the latent classes and the comparability of the classifications, the five-class solution was chosen for both the self-peer and self-teacher profiles.

The results support the hypotheses that at least four profiles of perceptual discrepancies in regard to self and others' evaluations of SC would appear. The five classes of discrepancies between the self- and peer ratings of SC (SC) were labelled according to their profiles as (1) *a congruent perception of SC* (45.7%) (94 girls; 75 boys), (2) *a quite congruent perception of SC* (22.9%) (52 girls; 38 boys), (3) *a negatively discrepant perception of SC* (8.1%) (14 girls; 16 boys), (4) *a positively discrepant perception of SC* (18.8%) (26 girls; 43 boys) and (5) *an extremely positively discrepant perception of SC* (4.4%) (0 girls; 12 boys). The profiles are presented in Figure 1. For the discrepancies between the self- and teacher ratings, the classes were labelled as (1) *a congruent perception of SC* (45.6%) (85 girls; 64 boys), (2) *a quite congruent perception of SC* (19.0%) (45 girls; 16 boys), (3) *a negatively discrepant perception of SC* (5.8%) (5 girls; 14 boys), (4) *a positively discrepant perception of SC* (22.2%) (18 girls; 54 boys) and (5) *an extremely positively discrepant perception of SC* (7.3%) (7 girls; 17 boys). The profiles are presented in Figure 2. See Table 5 for an overview of the categorisation of the profiles and their characteristics.

Regarding the proportions of boys and girls, many of the differences for the latent classes were statistically significant. For the self-peer model, significant differences were found between the class of *congruent perception of SC* and the class of *positively discrepant perception of SC*. Also, statistically significant differences were found between the class of *extremely positively discrepant SC* and i) *congruent perception of SC* class, ii) *quite congruent perception of SC* class, iii) *positively discrepant perception of SC* class, and iv) *negatively discrepant perception of SC* class indicating that boys were significantly more than girls in the groups of extremely discrepant perceptions compared to all other groups. For the self-teacher model, the differences between the class of *congruent perception of SC* and the classes of the *positively discrepant*, *negatively discrepant* and *extremely positively discrepant perception of SC* were statistically significant indicating that more girls belonged to the group of congruent perceptions than to the other three groups. Similarly, the differences between the class of *quite congruent perception of SC* and the classes of *positively discrepant perception of SC* and *negatively discrepant perception of SC* were statistically significant indicating that significantly more girls belonged to the group of quite congruent perceptions than to the other two groups of discrepant perception. The p-values for the differences between the latent classes are presented in the Table 4. The results rejected the hypothesis that there are no statistically significant differences between girls and boys relative with the latent classes.

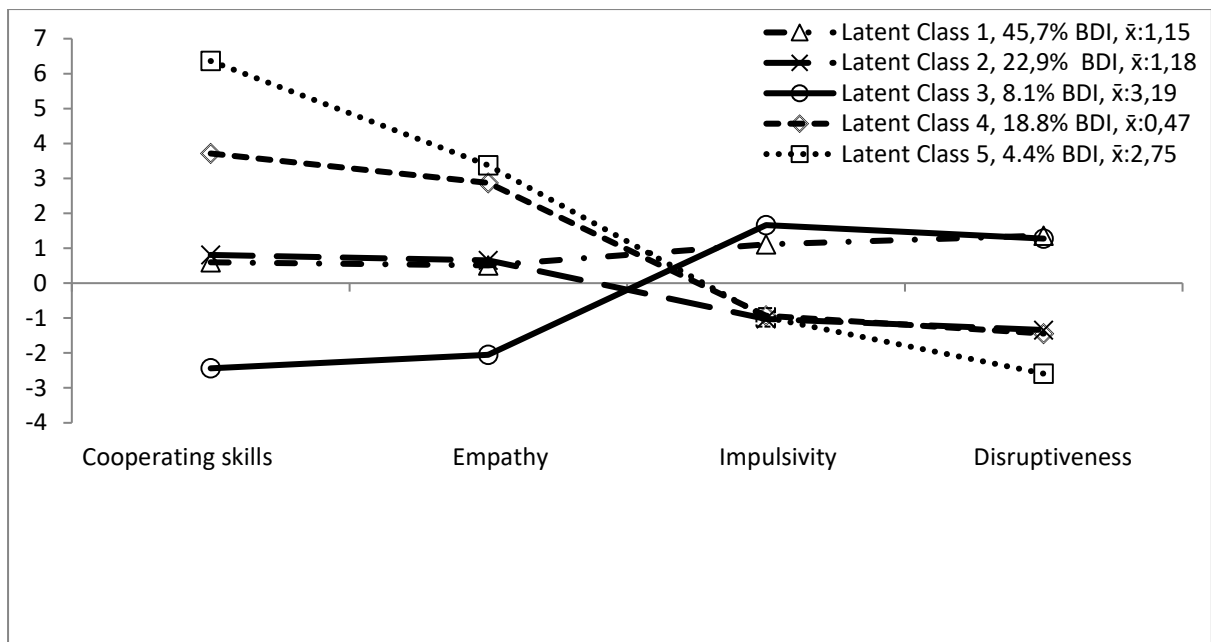
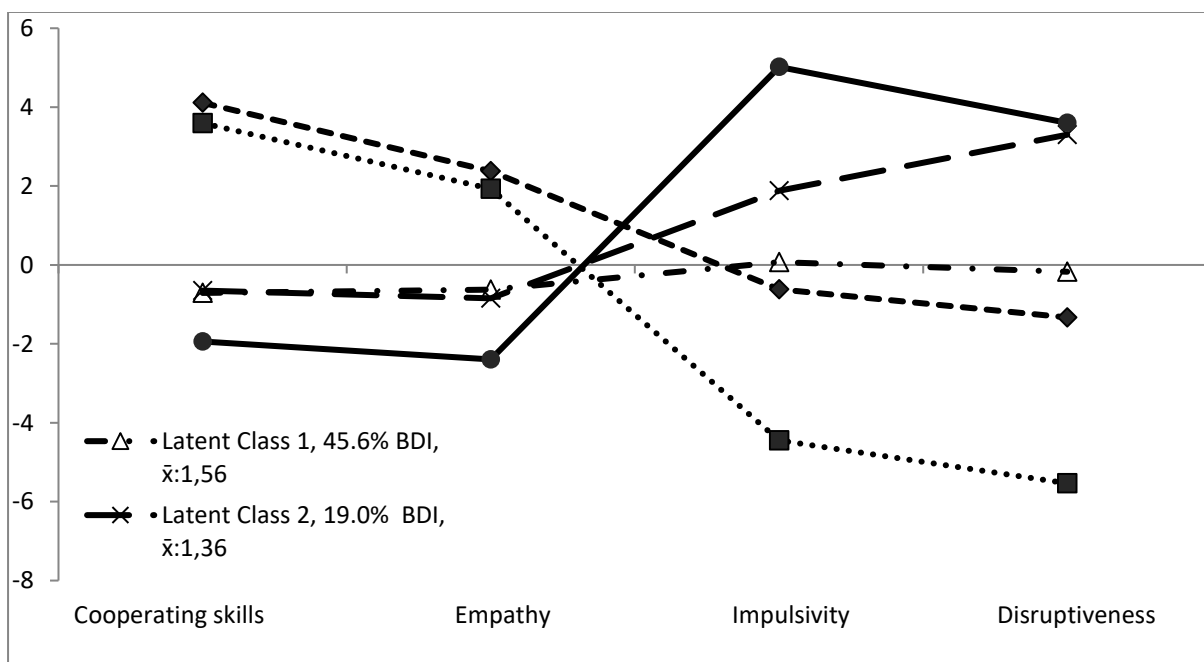


Fig 1a Latent classes of self-peer rating discrepancies regarding adolescents' social competence



Notes. Class 1 vs. 4, p : 0.013.

Fig 1b Latent classes of self-teacher rating discrepancies regarding adolescents' social competence

Table 4. LPA classes labelled according to their profiles

Classes	Means (SD)			Profile Characteristics	Classes	Means (SD)		
	V	Self	Peer			V	Self	Teacher
1 (45.7 %)	CO	13,8 (2)	13,1 (1,8)	REALISTIC PERCEPTIONS OF SC (slightly positive, overrating CO, EM, IM, DI)	1 (45.6%)	CO	13,4 (2,6)	14,2 (2,7)
	EM	8,9 (1)	8,3 (0,9)			EM	8,8 (1,5)	9,5 (1,5)
	IM	5,7 (1,4)	4,6 (0,8)			IM	4,6 (1,6)	4,5 (1,5)
	DI	7,3 (1,6)	5,9 (1,1)			DI	5,8 (1,8)	6 (2)
2 (22.9 %)	CO	13,7 (2)	13 (1,5)	QUITE REALISTIC PERCEPTIONS OF SC	2 (19%)	CO	13,4 (2,4)	14,2 (2,7)
	EM	8,9 (1,2)	8,3 (0,7)			EM	8,7 (1)	9,6 (1,5)
	IM	3,5 (0,7)	4,6 (0,7)			IM	5,9 (1)	3,9 (1)
	DI	4,7 (1)	6,1 (1)			DI	8 (1)	4,5 (0,9)
3 (8.1 %)	CO	9,8 (3)	12,4 (2,4)	NEGATIVE ILLUSION OF SC (considerably underestimates CO, EM, & overrates IM, DI) highest in depression	3 (5.8%)	CO	11,5 (3)	13,8 (2,5)
	EM	5,8 (1,8)	8 (1,4)			EM	7 (1,9)	9,6 (1,7)
	IM	6,7 (2,8)	5 (1,2)			IM	9 (1,6)	3,6 (0,9)
	DI	7,8 (3,4)	6,5 (1,5)			DI	9 (3,4)	5,5 (1,7)
4 (18.8 %)	CO	15,8 (2,6)	11,9 (2)	POSITIVE ILLUSION OF SC (slightly underestimating IM, DI considerable overestimation of their CO, EM) lowest in depression	4 (22.2%)	CO	15,2 (2,4)	10,8 (3)
	EM	10,6 (1)	7,5 (1)			EM	9,9 (1,4)	7,7 (1,5)
	IM	4 (1,4)	5 (1)			IM	4,7 (1,9)	5,2 (1,6)
	DI	5,4 (1,7)	6,8 (1,7)			DI	6 (2,2)	7,2(3)
5 (4.4 %)	CO	17,4 (3,4)	10 (2)	EXTREMELY POSITIVE ILLUSION OF SC (extreme overestimation of CO, EM and extreme underrating of IM, DI) 2 nd highest in depression	5 (7.3%)	CO	13,9 (4,4)	10,5 (2,8)
	EM	10 (2)	6,4 (0,8)			EM	8,6 (2,8)	6,3 (1)
	IM	5,2 (3,2)	6,5 (1,1)			IM	3,6 (1,2)	8,1 (1,5)
	DI	6 (2,8)	9,3 (1,4)			DI	5,5 (1,8)	11,2 (2)

Notes. SC, social competence; CO, cooperating skills; EM, empathy; IM, impulsivity; DI, disruptiveness.

		Classes of self-teacher * Classes of self-peer Crosstabulation			
		self-peer			
		1	2	3	4
self-teacher	1	69	56	12	17
	2	56	0	2	2
	3	6	0	9	0
	4	22	15	1	34
	5	1	5	3	7
Total		154	76	27	60

Associations of Discrepancy Profiles with Depressive Symptoms

The second aim of this study was to examine whether adolescents belonging to different latent classes evaluated their own depressive symptoms differently. The lowest means in depressive symptoms appeared in the profile of adolescents who reported a slightly more positive perception of their own SC than those of others. The profiles of adolescents having a congruent perception of their SC with that of others were among the lowest, as well. The highest means of depressive symptoms were found in the profiles of adolescents with a discrepant perception of SC, both negatively and extremely positively. The results support the hypotheses that adolescents in classes characterized by positive perceptual discrepancies or congruent perceptions about their SC would report a low number of depressive symptoms while adolescents in classes characterized by negative and extremely positive perceptual discrepancies of their SC would report high number of depressive symptoms.

The p-values for the differences between the latent classes are presented in the notes of Figure 1 for the self-peer discrepancies and Figure 2 for the self-teacher discrepancies. Most of the differences for the latent classes of the self-peer discrepancies model were statistically significant, indicating that the adolescents with a positively discrepant perception of their SC reported less depressive symptoms than the adolescents of the other latent classes. Moreover, the statistically significant values for class 1 versus classes 3 and 5 indicate that the adolescents

who had a self-perception of their SC congruent with those of their peers reported less depressive symptoms than those who had a considerably negatively discrepant perception of their SC as well as those withholding an extremely positively discrepant perception of their SC. Classes 1 and 2, which had the most congruent self-perceptions of SC, and classes 3 and 5, which had the most discrepant perceptions of SC, showed non-significant values.

Finally, we performed a cross-tabulation analysis to examine the common participants of the self-peer and self-teacher models. The results showed that with regard to class 1 (realistic), the self-peer model and the self-teacher model shared almost half of their cases. As Class 1 (congruent) and class 2 (quite congruent) were very close to each other in terms of discrepancy scores, there is much overlapping between them, which might explain why for class 2 (quite congruent), the two models had no participants in common. For class 3 (positively discrepant), the self-peer model shared 30% of the individuals, whereas it was 56% for the self-teacher model. For class 4 (negatively discrepant), almost half of the participants were found to belong to both self-peer (49%) and self-teacher (47%)_models. For class 5 (extremely positively discrepant), the self-peer and self-teacher models shared 58% and 30% of the participants, respectively.

Discussion

The aim of this study was to identify the different perceptual discrepancy profiles of adolescents' SC and how these discrepancy profiles are related to the adolescents' depressive symptoms. The results revealed five classes of perceptual discrepancy profiles. Adolescents who reported a slightly more positive perception of their own SC relative to others' evaluations and those with congruent self-views of their SC reported lower depressive symptoms. Adolescents who held a discrepant perception of their SC, whether negatively or extremely positively relative to how others evaluated them, reported the highest levels of depressive symptoms.

LPA showed the following distinct profiles: a congruent perception of SC, a quite congruent perception of SC, a negatively discrepant perception of SC, a positively discrepant perception of SC and an extremely positively discrepant perception of SC. The profiles of adolescents' perceptual discrepancies in regard with their SC that emerged in our study provide partial support to the findings of Brendgen et al. (2004) that there are three groups of adolescents in terms of perceived SC: adolescents who perceive their SC more positively than others evaluate them, adolescents who hold extremely positive perceptions of their SC relative to how others evaluate them and adolescents who perceive their SC more negatively than others evaluate them. This result indicates that a considerable part of the adolescent population see and report themselves differently from how others see them.

The findings of this study suggest that the different discrepancy profiles of the adolescents' SC were differently associated with depressive symptoms. More specifically, congruent perceptions, as well as slightly positively discrepant perceptions, appeared to be associated with low depressive symptoms. This result is important because previous research mainly focused on adolescents with negatively biased perceptions of SC (Rudolph & Clark, 2001), positively biased perceptions of SC (Lewinsohn, Mischel, Chapln & Barton, 1980) or both (Bédard, Bouffard, & Pansu 2014), but not very much on those who perceived themselves similarly with how others evaluated them.

Consistent with past studies (Qian, Wang, & Chen, 2002), the findings suggest that the social self-evaluations of non-depressed individuals can be relatively accurate. In this study, the adolescents who perceived themselves similarly with how others viewed them in terms of their SC were among those with the lowest number of depressive symptoms. The fact that the largest proportion of adolescents (69%) in our study was found to have views congruent with those of others in terms of their own SC corroborates research findings that suggest that adolescents tend to be more congruent with their peers (Harter, 1990; Mezulis et al., 2004).

Previous research has found no statistically significant differences in self-protective attributional bias between boys and girls although starting from early adolescence females show a stable decline in positivity bias until late adulthood (Mezulis et al., 2004). In this study, more girls belonged to the groups of congruent and quite congruent perception of SC, while boys were overrepresented in the profiles of discrepant perceptions of SC (including negatively discrepant, positively discrepant, and extremely positively discrepant perceptions of SC) for both self-peer and self-teacher models. Given the cross-sectional nature of our study it is not possible to know whether these differences reflect the beginning of a decline in positivity bias for girls, which in turn can make their self-perceptions of SC become more congruent with those of others.

Our results indicate that adolescents who held slightly positively discrepant perceptions of their SC reported the least depressive symptoms. This finding lends support to the view that favourable perceptions of self-SC are connected with low depressive symptoms (Bédard, Bouffard, & Pansu 2014; Chen et al., 2002). Past research (Taylor & Brown, 1988) suggests that adolescents who hold a generally positive view of themselves tend to positively interpret information that is ambiguous or contradictory to their beliefs so that incoming information can fit into their prior belief system (Abramson et al., 2002). Along these lines, this beneficial effect of positively discrepant perceptions might also apply to the way adolescents interact with others. More specifically, individuals who believe they are successful in terms of their social performance might actively initiate contact in social situations more often, feel discouraged less easily if their initial efforts are not fruitful and even be more confident to alter their strategies (Taylor & Brown, 1988). Such a positive attitude in social situations might trigger positive feedback from others, resulting in satisfaction derived from social interactions and thus a decrease in the chance of experiencing depressive symptoms. On the other hand, adolescents who experience less depressive feelings might be able to view social challenges

more positively and thus approach them in a more optimistic way than others. Taylor and Brown (1988) argued that self-protective attributional bias serves to maintain or enhance a positive self-image that is essential for the maintenance of mental health. That is because positive perceptions of one's own SC promote feelings of happiness and contentment, the capacity for creative and productive work and the ability to care for others, with all these aspects being the central aspects of adaptive psychosocial functioning. Seeing oneself favourably, yet close to others' evaluations of one's own SC, seems crucial for the maintenance of mental health.

We also found that a negative discrepancy in SC perceptions was strongly associated with depressive symptoms. In this study, adolescents who showed negative discrepancies between their perceptions and others' evaluations of their own SC exhibited the highest number of depressive symptoms. This finding is consistent with previous research (DuBois, Felner, Bartels, & Silverman, 1995; Uhrlass et al., 2009). The negative discrepancy between self- and others' evaluations might be due to what previous scholars have described as depressive attributional style (Abramson et al., 2002). In line with this theory, the finding could indicate that adolescents of the negatively discrepant group in our study have difficulty accepting positive feedback because the positive feedback is not consistent with their negative self-views as suggested by Swann (1990). Rejecting positive feedback in favour of negative feedback allows negative self-views to be maintained or even enhanced. The finding indicates the need for this group of adolescents to be identified and given support as early as possible before the negative interpretations of social situations exacerbate depressive symptoms.

This study found that adolescents who held extremely positively discrepant perceptions of their SC reported the second-highest number of depressive symptoms. Notably, the observed link between an extremely positive discrepancy and a high number of depressive symptoms corroborates previous research that there may be conditions under which a positively

discrepant self-view compromise rather than enhance mental health (Taylor & Brown, 1994; Hughes et al., 2001). The proponents of this view contend that an excessively positive perception compared others' evaluations on one's own SC might create unrealistic and exaggerated expectations of friendly behaviour from others. If these expectations are not met because peers do not perceive the relationship with the person as equally positive, the individual has two choices—either to reject it, which may result in anger and frustration, or accept the negative attitude of others and interpret it as a sign of rejection, which entails the risk of depressive symptoms (Hughes et al., 2001). Our study confirmed the second explanation and found the need to take into consideration adolescents with this developmental profile for timely identification and intervention purposes. The extremely large discrepancies between self- and others' views might reflect excessive self-protective bias which in turn might lead to unrealistic beliefs of invulnerability that undermine an individual's capacity to appropriately alter his/her own behaviour to achieve different outcomes in cases of negative events or failures in social life.

Conclusions and Future Research Directions

This study showed that slightly positively discrepant self-perceptions of SC are negatively associated with depressive symptoms. The results indicated that viewing one's self not very different compared to others' views plays an important role in psychological well-being. Additionally, our findings illustrated that the larger was the discrepancy between the self- and others' ratings of SC, the more depressive symptoms were reported by the adolescents of these groups.

The results of this research are important for a number of reasons. First, the findings underline the importance of accurate information processing for mental health and the value of promoting positive self-views in terms of prevention and intervention. Second, in contrast to literature that has mainly reported the risk factors for mental health (Rudolph & Clark, 2001),

our study presents the profiles of positive adjustment. Third, the findings present the profiles of adolescents with increased depressive symptoms and thus suggest the need for intervention that tackles initial symptoms before they evolve into clinical conditions. This result is particularly important during the developmental phase of adolescence because puberty may be a challenge in itself, and it may increase the depressive symptoms in those already experiencing moderate levels of depression (Buttigieg et al., 2015).

The aforementioned distinct profiles and differences in the reported SC suggest that interventions designed to mitigate depression cannot be unilateral. To make any meaningful impact on students, different intervention approaches and strategies are needed for different sub-groups. These interventions need to be tailored to individual needs. For instance, an improvement in self-esteem through cognitive behavioural therapy (Friedberg & McClure, 2015; Nagle & Glover Gagnon, 2014; Raffaele Mendez, 2017) might be a good intervention technique for adolescents who underestimate their SC, but it might not always be adequate as an intervention strategy for adolescents who extremely overrate their SC. A reason for this is that in our study, the adolescents who held an extremely positively biased perception of their SC extremely overestimated their pro-social behaviour and extremely underestimated their anti-social behaviour, while they were rated by their peers and teacher as less cooperating and empathetic and much more impulsive and disruptive. These adolescents might be also in need of social interventions on skills improvement, such as approaches that focus on altering extremely biased perceptions and improving adolescents' social skills.

An important element towards effective social skills training is the reinforcement of the construct of empathy. Feshbach (1984) identified empathy as an aspect of the self to be reinforced to foster pro-social behaviours and eliminate anti-social behaviours. Researchers proposed a multidimensional construct of empathy consisting of a cognitive and an affective component (Feshbach & Feshbach, 1987). The cognitive component enables a child to

understand another person's perspective, and the affective component allows the child to experience the emotions of the other person. Understanding the other person's perspective, including feelings of distress and fear during a conflict, reduces the probability that the child will view the peer as deserving of aggressive retaliation, thus increasing the chances of an instinctive withdrawal of aggression. We are conscious of the fact that empathy is not the only dispositional trait that could help reinforce social skills. Several personal, educational and social aspects must also be considered to understand the pathways that lead children to assume different positive and negative roles with peers.

To date, scholars have been referring to self-judgments in terms of biases. That is understandable to some extent because as research has shown cognition is influenced by several factors besides objective evidence (Heider, 1958). Subjective needs, desires, and social desirability can influence the interpretations and judgments of one's self. However, it is essential to note that others can be influenced by the nature of relationship, preferences, and the different expectations the evaluator has toward the individual. Taking for granted that self-evaluations are biased if they differ from others' perspective can be problematic if the nature of data cannot ensure that others' judgments reflect the reality. In terms of social phenomena and interpersonal interactions, the objective reality might not even be the most important determinant. The emotions and perceptions of individuals and how discrepant or congruent these are could affect more the trajectory of interpersonal relationships than the objective reality. Thus, it is necessary to re-think whether self-ratings being discrepant from others' evaluations is an adequate reason to consider them as biased.

An advantage of this study is that it used multiple sources of information for the assessment of adolescents' SC, a practice that has been recommended by scholars when studying SC (Renk & Phares, 2004; Semrud-Clikeman, 2007). Although the self- and teacher ratings come from a single source and may, therefore, be influenced by person-related factors,

the use of peer ratings increases reliability by eliminating the possible influence of individual factors (Warden & Mackinnon, 2003). Moreover, methodologically, this study may be among the first of its kind to report such profiles by using LPA, which is a person-centred data analytic method to identify different sub-groups with similar perceptual discrepancy patterns regarding one's SC, instead of variable-centred approaches that have been commonly used in previous studies. Despite its strengths, this study has some limitations. The use of cross-sectional data of adolescents' multisource-assessed SC and self-reported depressive symptoms although may reflect the prevailing situation, no conclusions regarding causality can be made. Future studies should focus on the longitudinal links of SC discrepancy profiles and depressive symptoms. Longitudinal designs should examine the possibility of transitions from one perceptual discrepancy profile to another with age.

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Table 1. Descriptive Statistics for Social Competence (SC) and Depressive symptoms

Table 1

Descriptive Statistics for Adolescents' Self-, Peer-, and Teacher-Rated Social Competence (SC) and for Adolescents' Depressive Symptoms aspects

	Min	Max	Mean	SD	Skewness	Kurtosis
SC/self-ratings						
Cooperating skills	5.00	20.00	13.99	2.82	– 0.37	0.74
Empathy	3.00	12.00	9.04	1.69	– 0.68	1.62
Impulsivity	3.00	12.00	4.97	1.89	1.19	1.59
Disruptiveness	4.00	16.00	6.38	2.16	0.92	1.37
SC/ peer ratings						
Cooperating skills	6.15	17.20	12.74	1.98	– 0.45	0.01
Empathy	4.80	10.45	8.12	1.05	– 0.56	0.20
Impulsivity	3.26	9.68	4.80	.98	1.48	3.49
Disruptiveness	4.20	11.94	6.36	1.42	1.34	1.82
SC/ teacher ratings						
Cooperating skills	5.00	20.00	13.20	3.20	– 0.29	– 0.16
Empathy	4.00	12.00	8.98	1.82	– 0.21	– 0.34
Impulsivity	3.00	12.00	4.79	1.79	1.16	1.55
Disruptiveness	4.00	16.00	6.30	2.67	1.22	0.92
Depressive symptoms	0.00	22.00	1.31	2.75	3.50	15.29

Notes. SC, social competence. The skewness and kurtosis for Depressive symptoms were beyond the reasonable limits;

to ensure robust statistics we used the MLR Robust Method.

Table2. Correlations between Social Competence and Depressiveness

Table 2

Correlations between aspects of (Cooperating Skills, Empathy, Impulsivity, Disruptiveness) of Social Competence within and between Raters (Self, Peers, and Teachers) and Depressive Symptoms

	Self- evaluations of SC				Peer evaluations of SC				Teacher evaluations of SC				Depressive symptoms
	CO	EM	IM	DI	CO	EM	IM	DI	CO	EM	IM	DI	
Self- evaluations of Social Competence													
Cooperating skills													
Empathy	,695**												
Impulsivity	-,237**	-,341**											
Disruptiveness	-,196**	-,325**	,637**										
Peer evaluations of Social Competence													
Cooperating skills	,411**	,297**	-,086	-,079									
Empathy	,316**	,304**	-,138**	-,140**	,898**								
Impulsivity	-,123*	-,234**	,265**	,219**	-,446**	-,578**							
Disruptiveness	-,098	-,186**	,141**	,259**	-,501**	-,641**	,810**						
Teacher evaluations of Social Competence													
Cooperating skills	,272**	,170**	-,054	,007	,552**	,459**	-,314**	-,293**					
Empathy	,174**	,169**	-,099	-,106	,454**	,438**	-,433**	-,443**	,680**				
Impulsivity	-,092	-,201**	,217**	,204**	-,311**	-,422**	,595**	,603**	-,319**	-,581**			

Disruptiveness	-,015	-,152**	,119*	,200**	-,263**	-,403**	,524**	,663**	-,252**	-,523**	,757**	
Depressive symptoms	-,216**	-,178**	,158**	,119*	-,189**	-,180**	,096	,110*	-,126*	-,062	,087	,055

Notes. SC, social competence; CO, cooperating skills; EM, empathy; IM, impulsivity; DI, disruptiveness.

Due to the skewness and kurtosis values of Depressive symptoms variable we calculated the Spearman's rho correlation between depressive symptoms and social competence items.

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 4. Comparisons of Latent Classes for Gender Differences

Table 4

Percentual Distributions of Girls and Boys between Profile Classess for the Self-Peer Model and for the Self-Teacher Model.

	Self-Peer Model					Self-Teacher Model				
	Gender		Comparison between groups			Gender		Comparison between groups		
	Girls	Boys	groups	Chi (df)	p-value	Girls	Boys	groups	Chi (df)	p-value
Class 1 (congruent perceptions of SC)	54 %	46 %	1 vs. 4	3.97 (1)	.046	57%	43 %	1 vs. 3	7.38 (1)	.007
Class 2 (quite congruent perceptions of SC)	58 %	42 %	2 vs. 5	65.16 (1)	.000	73 %	27 %	2 vs. 4	7.46 (1)	.006
Class 3 (negatively discrepant perceptions of SC)	48 %	52 %	3 vs. 5	23.5 (1)	.000	26 %	74 %	2 vs. 3	4.61 (1)	.032
Class 4 (positively discrepant perceptions of SC)	38 %	62 %	4 vs. 5	31.4 (1)	.000	25 %	75 %	1 vs. 4	6.15 (1)	.013
Class 5 (extremely positively discrepant perceptions of SC)	0 %	100 %	1 vs. 5	172.6 (1)	.000	31 %	69 %	1 vs. 5	4.66 (1)	.031

Notes. Only the comparisons between groups that showed statistically significant differences have been included in this table.

Table 3. Model Fit for the series of discrepancies of social competence (SC) latent profile analysis (LPA)

Table 3

Model Fit Estimates, Distinguishability Estimates, Class Proportions and Average Latent Class Posterior Probabilities for the series of discrepancies between self- peer and self- teacher ratings of SC LPA

	Log likelihood	AIC	BIC	Entropy	Class proportions	Average latent class posterior probabilities
SC discrepancies/ self-peer						
1 Class	-3222.247	6460.494	6491.910	1.000	1.000	1.000
2 Class	-3110.388	6254.777	6321.535	.663	.629/.370	.919/.869
3 Class	-3032.055	6116.110	6218.210	.776	.074/.608/.317	.911/.900/.886
4 Class	-2965.241	6000.482	6137.925	.803	.498/.304/.077/.012	.927/.862/.909/.868
5 Class	-2941.235	5970.471	6143.256	.807	.240/.464/.080/.184/.032	.819/.919/.895/.850/.924
6 Class	-2917.757	5941.514	6149.641	.848	.249/.461/.081/.027/.172/.008	.862/.916/.920/.879/.839/1.000
SC discrepancies/ self-teacher						
1 Class	-3059.929	6135.858	6166.178	1.000	1.000	1.000
2 Class	-2967.282	5968.563	6032.993	.679	.718/.281	.923/.866
3 Class	-2910.397	5872.794	5971.333	.733	.070/.663/.266	.914/.885/.893
4 Class	-2876.574	5823.148	5955.767	.791	.073/.238/.623/.064	.883/.851/.910/.861
5 Class	-2847.961	5783.922	5950.680	.793	.070/.183/.223/.474/.048	.882/.861/.844/.883/.952
6 Class	-2831.550	5769.099	5969.967	.760	.072/.357/.225/.060/.098/.186	.880/.821/.805/.944/.846/.835

Notes. AIC, Akaike information criterion; BIC, Bayesian information criterion; SC, social competence.

Table 5 Profiles of the latent profile analysis LPA classes

Table 5

Descriptive Statistics for LPA Classes Labeled According to their Profiles

Classes	Means (SD)			Profile Characteristics	Classes	Means (SD)		
	V	Self	Peer			V	Self	Teacher
1 (45.7 %)	CO	13.8 (2)	13.1 (1.8)	CONGRUENT PERCEPTION OF SC (positive discrepancies for CO, EM, IM, DI)	1 (45.6 %)	CO	13.4 (2.6)	14.2 (2.7)
	EM	8.9 (1)	8.3 (0.9)			EM	8.8 (1.5)	9.5 (1.5)
	IM	5.7 (1.4)	4.6 (0.8)			IM	4.6 (1.6)	4.5 (1.5)
	DI	7.3 (1.6)	5.9 (1.1)			DI	5.8 (1.8)	6 (2)
2 (22.9 %)	CO	13.7 (2)	13 (1.5)	QUITE CONGRUENT PERCEPTION OF SC	2 (19 %)	CO	13.4 (2.4)	14.2 (2.7)
	EM	8.9 (1.2)	8.3 (0.7)			EM	8.7 (1)	9.6 (1.5)
	IM	3.5 (0.7)	4.6 (0.7)			IM	5.9 (1)	3.9 (1)
	DI	4.7 (1)	6.1 (1)			DI	8 (1)	4.5 (0.9)
3 (8.1 %)	CO	9.8 (3)	12.4 (2.4)	NEGATIVELY DISCREPANT PERCEPTION OF SC (negative discrepancies for CO, EM, & positive discrepancies for IM, DI)	3 (5.8 %)	CO	11.5 (3)	13.8 (2.5)
	EM	5.8 (1.8)	8 (1.4)			EM	7 (1.9)	9.6 (1.7)
	IM	6.7 (2.8)	5 (1.2)			IM	9 (1.6)	3.6 (0.9)

	DI	7.8 (3.4)	6.5 (1.5)	highest in depressive symptoms		DI	9 (3.4)	5.5 (1.7)
	CO	15.8 (2.6)	11.9 (2)	POSITIVELY DISCREPANT PERCEPTION OF SC	4	CO	15.2 (2.4)	10.8 (3)
4	EM	10.6 (1)	7.5 (1)	(negative discrepancies for IM, DI	(22.2 %)	EM	9.9 (1.4)	7.7 (1.5)
(18.8 %)	IM	4 (1.4)	5 (1)	positive discrepancies for CO, EM)		IM	4.7 (1.9)	5.2 (1.6)
	DI	5.4 (1.7)	6.8 (1.7)	lowest in depressive symptoms		DI	6 (2.2)	7.2(3)
	CO	17.4 (3.4)	10 (2)	EXTREMELY POSITIVELY DISCREPANT PERCEPTION OF SC	5	CO	13.9 (4.4)	10.5 (2.8)
5	EM	10 (2)	6.4 (0.8)	(extremely positive discrepancies CO, EM and extremely	(7.3 %)	EM	8.6 (2.8)	6.3 (1)
(4.4 %)	IM	5.2 (3.2)	6.5 (1.1)	negative discrepancies for IM, DI)		IM	3.6 (1.2)	8.1 (1.5)
	DI	6 (2.8)	9.3 (1.4)	2 nd highest in depressive symptoms		DI	5.5 (1.8)	11.2 (2)

Notes. SC, social competence; CO, cooperating skills; EM, empathy; IM, impulsivity; DI, disruptiveness.

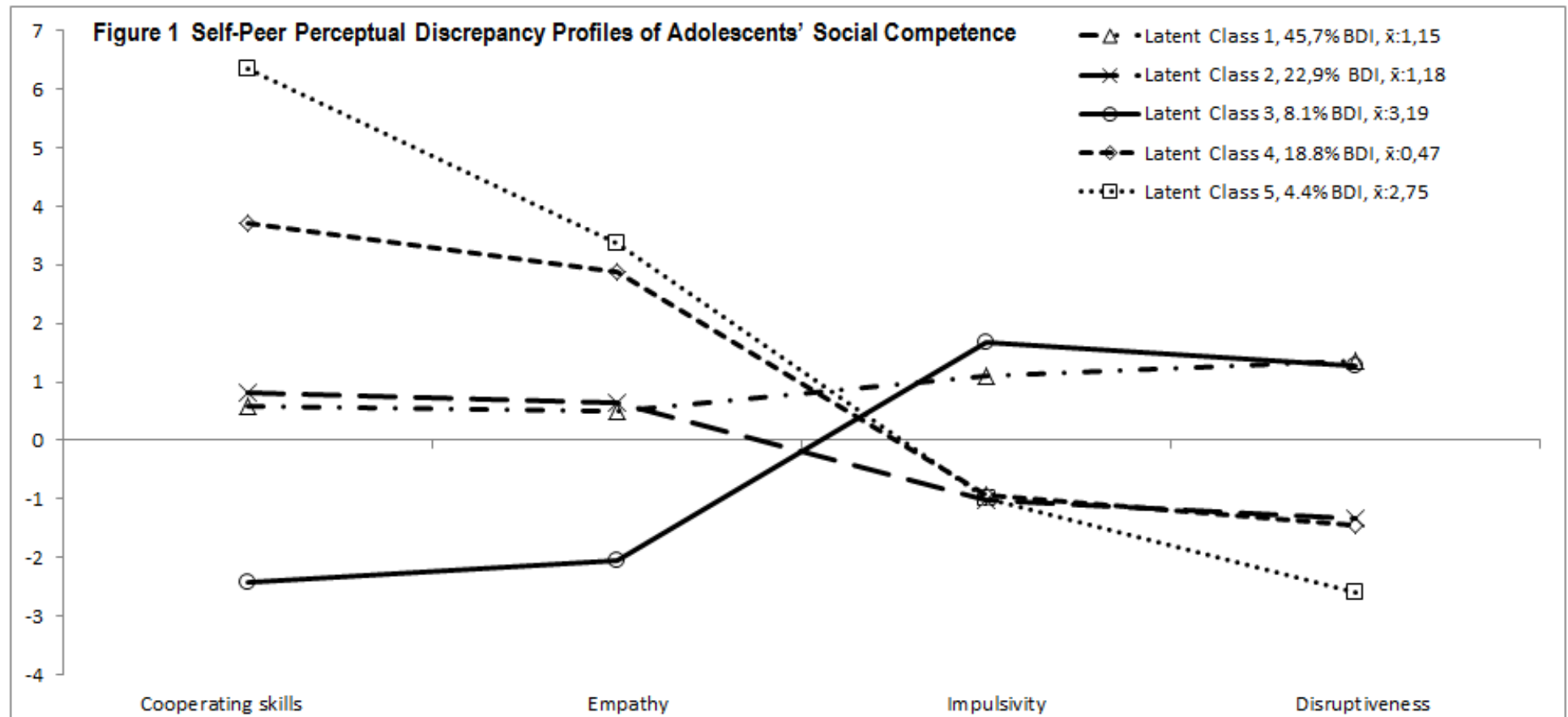


Fig 1. Line chart for the latent classes of self-peer discrepancies between evaluations of adolescents' social competence. LPA = latent profile analysis.

Notes. Class 1 vs. 3, p : 0.021; Class 1 vs. 4, p : 0.002; Class 1 vs. 5, p : 0.042; Class 2 vs. 3, p : 0.027; Class 2 vs. 4, p : 0.015; Class 3 vs. 4, p : 0.002; Class 4 vs. 5, p : 0.003.

