**Being yourself in adolescence? False self in the context of self-esteem and mental health
among adolescents**

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Please note this manuscript has not yet been peer reviewed and is therefore subject to further changes.

This work was funded by Slovak Research and Development Agency [APVV-17-0418] and by Research grant agency of Ministry of Education, science, research and sport of the Slovak Republic and Slovak Academy of Science [VEGA 1/0870/18]

Declaration of conflict of interest: None

Supplementary materials: Data, analytical code, and additional materials are available at <https://osf.io/beugt/>

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Abstract

Many adolescents feel that their true self is not good enough for others, so may choose to adopt false self behavior. In the context of adolescent development, false self and low self-esteem are risk factors of depression and anxiety. This study aims to analyze relationships among false self, self-esteem, anxiety, and depression, in 134 adolescents. Three hierarchical linear models with moderation effect were tested. Was found that adolescent's low self-esteem plays an important role in the manifestation of false-self behavior, and a higher level of anxiety amplify this relationship. The study offer that lower level of anxiety can weaken relationship between low self-esteem and false self, what may play an important role in maladaptive development in adolescents.

Keywords: adolescence, self-esteem, false-self, anxiety, depression

Introduction

Adolescence is a very important period of life for expanding the capacity to self-perception (Blasi & Milton, 1991; Buhrmester & Prager, 1995). However, it is during this time that a lot of abstract questions begin to occur, such as: “Who am I?”; “What characteristics describe me?”; “What am I good at, and what I am not good at?”; “What will my life be like in the future?” (Arnett, 2006). Adolescents often experience internal conflicts and tension (Weir & Jose, 2010). This can take the form of “I think I'm really happy with my friends, but unhappy with my family, but it's not really me,” “I hate the fact that I'm so nervous on a date. My real self is talkative, I try to be natural, but I can't” (Harter, 2002, p. 385). Harter, Waters, and Whitesell (1997) have suggested that coherent self-perception can be problematic in adolescence.

However, in the context of the coherent self-perception there exists a difference between having multiple selves and having a false self. Harter, Waters et al., (1997) have noted that adolescents manifest different personalities with their mother, father, close friends, romantic partners or peers. Some adolescents claim that different behaviour in different situations is fine (Weir & Jose, 2010). According to Harter, Waters et al. (1997), it represents multiple selves. Adolescents can form multiple selves in relation to their different social roles and in different contexts (Harter, 1999). This means that they could feel cheerless with family, happy in a group of friends, shy with a partner, open in a group of close friends, hardworking at school, reliable at work or naughty and less responsible with peers (Harter, Bresnick, Bouchev, & Whitesell, 1997). The formation of multiple selves is one of the critical developmental roles in adolescence (Harter, Bresnick et al., 1997). However, false self is the extent of behavior that does not reflect the true self (Harter, Marold, Whitesell, & Cobs, 1996; Steinberg & Morris, 2001). While having multiple selves is considered a normal developmental process, a false self is typically considered to be inauthentic (Harter, 1999).

In the context of false self acceptance by parents is very important in adolescence (Ohannessian, Lerner, von Eye, & Lerner, 1996). Adolescents who stated that their parents and peers accept them as they really are, listen to their opinions and respect their feelings, scored higher in the level of real self. On the other hand, adolescents with a higher level of false self reported that their parents and peers do not like who they really are (Harter, 2002). Thus, adolescents experiencing the feeling that their real self is not good enough for others can't appreciate themselves (Harter, Waters et al., 1997). Generally, acceptance play an important role in the level of self-esteem. The lack of acceptance leads to low self-esteem (Michikyan,

Dennis, & Subrahmanyam, 2014) and consequently it leads them to choose behavior that inhibits expressing their true self in a desire to fit in (Harter, 2002).

There exist a lot of concepts considered that suppression of opinions or behavior can have a negative effect. The lack of voice theory represents the inability to express one's own opinion to others what can lead to a negative well-being (Harter, Waters et al., 1997; Harter, Waters, Whitesell, & Kastelic, 1988). This theory is similar to the self-silencing theory (the suppression of self), in the context of suppressing views in favor of a romantic relationship (Jack & Dill, 1992; Harper, Dickson, & Welsh, 2006; Little, Welsh, Darling, & Holmes, 2011; Thompson, 1995). Women who are in favor of staying in a partnership suppress their true self, do not express their opinions, thoughts, feelings, or behaviors, and consequently experience depression (Jack, 1991; Jack, 2010; Smolak & Munstertieger, 2002). Based on the self-discrepancy theory, Higgins (1987) has argued that a discrepancy between the real and false self is associated with emotional states such as depression or anxiety. It seems that suppression the real self leads to negative affectivity (Weir & Jose, 2010).

Self-discrepancy (as a discrepancy between “who I am” and “whom I should be”) negatively affects not only self but also self-esteem in adolescents. The false self is related to negative affectivity, especially when adolescents try to hide their true self, feeling it is not good enough for others. The suppression of true thoughts and feelings in adolescents can be accompanied by anxiety symptoms and consequently can lead to development of depressive symptoms (Harter et al., 1996). Higgins (1987) has also pointed out the same negative effect of self-discrepancy on self-esteem (Higgins, 1989; Higgins, Bond, Klein, & Strauman, 1986).

The challenges that adolescents have to face may increase the incidence of mental health issues (Kessler et al., 2007). The occurrence of depressive symptoms in adolescence and early adulthood may increase the likelihood of suffering from an affective disorder in the future (Dunn & Goodyer, 2006). Over the last decade, the National Health Information Center of Slovakia (2017) has noted that the most significant increase has been recorded in the areas of neurotic disorders, phobias and anxiety among adolescents aged 15 to 19 years. Nowadays, more and more patients coming to psychiatrists or psychologists are adolescents with daily functioning problems due to higher level of depressive symptoms. Mental health issues in adolescents can be closely related to difficulties in forming their own identity (Chen, Lay, Wu, & Yao, 2007). Being true self rather false self is important positive predictor of well-being a personal happiness (Peets & Hodges, 2017; Koydemir et al., 2018; Blanca et al., 2018; Rivera et al., 2019), and authenticity is protective factor of mental health issues such as depressive and anxiety symptoms (Bryan et al., 2015; Wang et al. 2019; Turner et al., 2020).

In this way, adolescents can experience negative affectivity such as depression or anxiety as a result of suppressing their real selves in a desire to fit in with others. Although it seems that affectivity is a result of self-concept (Higgins, 1987; Jack, 1991) Weir and Jose (2010) have argued that is important to examine also the opposite direction effect – from negative affectivity as anxiety to self-concept. In other words, self-discrepancy could lead to low self-esteem which could cause higher anxiety. False self behavior could reduce the anxiety, but for a short time. In the long run it could contribute to a development of depression. However, it needs be verified.

Our study aims to examine the relationship between the false self and negative affectivity whilst taking the level of self-esteem into account. It was hypothesized that false self would be a predictor of depression and anxiety, while self-esteem would have a moderating effect. It was also hypothesized that the opposite direction effect - self-esteem, depression, and anxiety would be predictors of false self. In this, it was hypothesized that anxiety would have a moderating effect on the relationship between self-esteem and false self.

Method

Participants

The sample consisted of secondary school pupils aged 15-19 ($M = 17.30$; $SD = 1.04$). Adolescence is one of the most critical periods in an individual's social development. It is important to be part of a peer group as well as develop and strengthen peer relationships. For this reason, this target group was selected for the study. The study was carried out in secondary schools in Slovakia. From the whole sample ($N = 147$), several questionnaires were excluded due to being largely incomplete. Thus, the final research sample consisted of 134 participants (69 girls and 65 boys). Apriori sample size was not computed but the effectiveness of the used sample size was checked by sensitivity analysis (compute by G*Power calculator). Given by alpha level 0.05, power 0.9, for most parsimonious regression model (with 5 predictors) was found that used $N = 134$ is enough to finding effect size - Cohen's $f^2 = 0.079$ (Noncentrality parameter $\delta = 3.266$, $t = 1.978$, $df = 128$).

Measures

POFS - Perceptions of false self (Weir & Jose, 2010) was used to evaluate the generalized false self. It is a one-factor instrument (McDonald's $\omega = 0.79$; $\alpha = 0.73$). It consists of 16 items formulated as sentences to which the person answers using a 5-point Likert scale, from 1-

strongly disagree to 5-strongly agree. Items are formulated as claims about adolescent's ability to express an opinion or true self, for example: "I act in ways that express who I really am."; "I say what I think even if it is different to the opinion of others." (Weir & Jose, 2010). Before administration, a back-translation was made in agreement with the author of the questionnaire.

In order to measure depressive symptoms, the Beck Depression Inventory, (BDI-II, Beck, Steer, & Brown, 1996) was used. The BDI-II is a self-reported scale and is used to detect the presence of depressive symptoms. It consists of 21 items (McDonald's $\omega = 0.86$; $\alpha = 0.84$) characterized by 4-5 assertions and 4 levels that determine the depth of the problem. Each item is evaluated using a 4-point scale from 0 to 3. Example of item to measure sadness: 0 ("I do not feel sad. "), 1 ("I feel sad. "), 2 ("I am sad all the time and I can't snap out of it. ") or 3 ("I am so sad and unhappy that I can't stand it."). Example of items to measure interest: 0 ("I have not lost interest in other people. "), 1 ("I am less interested in other people than I used to be."), 2 ("I have lost most of my interest in other people. ") or 3 ("I have lost all of my interest in other people. "). Person answers by choosing one of the statements. Each item is oriented to one of the areas that are significantly affected by depression.

The Beck Anxiety Inventory was used to measure anxiety symptoms (BAI, Beck, Epstein, Brown, & Steer, 1988). The BAI is used to assess the severity of anxiety symptoms. It consists of 21 items (McDonald's $\omega = 0.93$; $\alpha = 0.91$) that are formulated as symptoms. Respondents use a 4-point scale from 0 to 3 to refer to how often symptoms have bothered them in the last two weeks. For example: „0 – not at all“, „1 - Mildly, but it didn't bother me much.“, 2 – „Moderately – it wasn't pleasant at times.“, „3 - Severely – it bothered me a lot.“ The items refer to feelings and physical aspects of a person.

In order to measure self-esteem, the Rosenberg self-esteem scale (RSES, Rosenberg, 1965) was used. The RSES is a one-dimensional tool for measuring self-esteem. It consists of 10 items (McDonald's $\omega = 0.86$; $\alpha = 0.81$) that relate to a person's overall self-perception, which may be high or low due to self-esteem (Halama & Bieščad, 2006). The respondent answers on a 4-point Likert scale from 1-strongly disagree to 4-strongly agree. Of the ten items, five are worded positive and five are negative. Items example: "On the whole, I am satisfied with myself." or "I feel I do not have much to be proud of." A high score represents a high level of self-esteem and vice versa.

Procedure

The research was carried out in several secondary schools in the east of Slovakia. The study was approved by the ethics board at the Institute of Psychology at the University and the

research was conducted following the Declaration of Helsinki. Before the measure was administered, the headteachers at these secondary schools were personally informed about the research methods. With their agreement, pupils were given informed consent to participate in the study. Their parents were also informed about the purpose of the study. Involvement in the study was voluntary and participants had the option to leave the research at any time. Only those pupils with both parental and personal consent participated in the research. These students were asked to complete the questionnaires which were administered in several classes. The questionnaires did not contain any forced questions and participants could leave out questions or any part of the data collection. The data was collected between January 2017 and March 2017.

Data analysis

Three hierarchical linear models were tested. In the first model, depression was regressed on self-esteem, false self, age and gender. In the second model, anxiety was regressed on the same predictors. Both models also tested for a moderating effect of self-esteem on the relationship between false self and depression/anxiety. In the third model, false self was regressed on anxiety, depression, self-esteem, age and gender. The moderation effect of depression (anxiety) on the relationship between self-esteem and false self was tested in this model. The linearity and multicollinearity of the variables were verified before testing the models. The linearity of the relationship between the independent variables and the dependent variable was not verified in the model but separately with the curve estimation method. In the multicollinearity, a critical value of more than 5 and a tolerance of less than .20 was chosen for the variance inflation factor (VIF) (O'Brien, 2007). The data were analyzed in R statistical software (R core team, 2018). The analytical code and data are available in the supplementary materials.

Results

Descriptive analysis

The descriptive statistics and correlations can be seen in Table 1.

Table 1

Means, standard deviations and correlations with confidence intervals

Variable	<i>M</i>	<i>SD</i>	<i>S.E.</i>	1	2	3	4
1. false self	38.73	6.78	0.59	0.78			
2. depression	12.59	7.61	0.66	0.38** [0.23, 0.52]	0.87		
3. anxiety	36.22	10.92	0.94	0.28** [0.12, 0.43]	0.62** [0.50, 0.71]	0.93	
4. self-esteem	28.26	4.30	0.37	-0.59** [-0.69, -0.46]	-0.49** [-0.61, -0.35]	-0.34** [-0.49, -0.19]	0.83

Note. *M*, *SD*, *S.E.* stand for mean, standard deviation, and standard error respectively. The values in the square brackets indicate the 95% confidence interval for each correlation. The confidence interval is the plausible range of population correlations that could have caused the sample correlation (Cumming, 2013). ** indicates $p < 0.01$. In the diagonal are values for reliability – Guttman's Lambda (λ_2).

Regression analysis and moderation

In the context of depression (Table 2), it was found that adolescents with a higher level of false self have also a higher level of depression but only when false self was examined without the context of other variables (Block 1). There was no effect found of the false self on depression if as predictors were measured also other variables (self-esteem, gender). In the context of these variables only gender and self-esteem seem to be crucial. In other words, it was found that men (Block 2; Block 3) and also adolescents with lower level of self-esteem were more depressed (Block 2). The moderation effect of self-esteem and false self on depression was not found (Block3). Table 1 shows the results of the hierarchical linear regression analysis using depression as the outcome. Although false self was found as a significant positive predictor of depression in the first block ($\beta = 0.38$, $p < 0.001$), in the second block only gender ($\beta = -0.18$, $p < 0.05$) and self-esteem ($\beta = -0.45$, $p < 0.001$) were negative predictors of depression. In the third block only gender was a significant negative predictor of depression ($\beta = -0.17$, $p < 0.05$).

Table 2

Regression results using depression as the criterion and false self (Block 1), gender and self-esteem (Block 2), and the interaction between false self and self-esteem (Block3) as predictors.

Predictor	<i>B</i>	<i>SE B</i>	β	Fit	Difference
<u>Block 1</u>					
(Intercept)	-4.06				
False self	0.43***	0.09	0.38		
				$R^2 = .15^{***}$	
				95% CI[.04,.26]	
<u>Block 2 (gender, self-esteem)</u>					
(Intercept)	30.71***				
False self	0.15	0.10	0.13		
Gender	-2.68*	1.16	-0.18		
Self-esteem	-0.80***	0.17	-0.45		
				$R^2 = .28^{***}$	$\Delta R^2 = .13^{***}$
				95% CI[.16,.40]	95% CI[.03, .23]
<u>Block 3 (false self and self-esteem interaction)</u>					
(Intercept)	9.16				
False self	0.70	0.45	0.62		
Gender	-2.61*	1.16	-0.17		
Self-esteem	-0.03	0.63	-0.02		
False self:Self-esteem	-0.02	0.02	-0.43		
				$R^2 = .29^{***}$	$\Delta R^2 = .01$
				95% CI[.17,.41]	95% CI[-.02,.04]

Note. * indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$

In the context of anxiety (Table 3), it was found that adolescents with a higher level of false self have also a higher level of anxiety but only when false self was examined without the context of other variables (Block 1). There was no effect found of the false self on anxiety if also other variables (self-esteem, gender) were measured as predictors. In this context only self-esteem was a predictor of anxiety. Specifically, it was found that adolescents with lower level of self-esteem were more anxious (Block 2). The moderation effect of self-esteem and false self on anxiety was not found (Block3). Table 2 shows the results of the hierarchical linear regression analysis using anxiety as the outcome. Although false self was found as a significant positive predictor of anxiety in the first block ($\beta = 0.28$, $p < 0.001$), in the second block only self-esteem ($\beta = -0.25$, $p < 0.05$) was a negative predictor of anxiety.

Table 3

Regression results using anxiety as the criterion and false self (Block 1), gender and self-esteem (Block 2), and the interaction between false self and self-esteem (Block3) as predictors.

Predictor	<i>B</i>	<i>SE B</i>	β	Fit	Difference
<u>Block 1</u>					
(Intercept)	18.65***				
False self	0.45***	0.13	0.28		
				$R^2 = .08^{***}$	
				95% CI[-.00,.17]	
<u>Block 2 (gender, self-esteem)</u>					
(Intercept)	45.61***				
False self	0.20	0.16	0.13		
Gender	1.65	1.83	0.08		
Self-esteem	-0.64*	0.26	-0.25		
				$R^2 = .13^{***}$	$\Delta R^2 = .05^*$
				95% CI[.03,.23]	95% CI[-.02, .12]
<u>Block 3 (false self and self-esteem interaction)</u>					
(Intercept)	16.55				
False self	0.95	0.71	0.59		
Gender	1.74	1.83	0.08		
Self-esteem	0.39	0.99	0.15		
False self:Self-esteem	-0.03	0.02	-0.41		
				$R^2 = .14^{***}$	$\Delta R^2 = .01$
				95% CI[.04,.24]	95% CI[-.02,.04]

Note. * indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$

At last, in the context of false self as the criterion, it was found that adolescents with a lower level of self-esteem have also a higher level of false self (Block 1, Block 2). The moderation effect of self-esteem and anxiety on false self was found (Block3). Table 1 shows the results of the hierarchical linear regression analysis using false self as the outcome. Although self-esteem was found as significant negative predictor of false self in the first block ($\beta = -0.59$, $p < 0.001$), and also in the second block ($\beta = -0.54$, $p < 0.001$), moderation effect of self-esteem and anxiety ($\beta = -1.60$, $p < 0.01$) was found in the third block. In other words, with lower self-esteem and higher anxiety there was a higher level of false self.

Table 4

Regression results using false self as the criterion and self-esteem (Block 1), self-esteem, gender, depression and anxiety (Block 2), and the interactions between self-esteem and depression and self-esteem and anxiety (Block3) as predictors.

Predictor	<i>B</i>	<i>SE B</i>	β	Fit	Difference
<u>Block 1</u>					
(Intercept)	64,93***				
Self-esteem	-0.93***	0.11	-0.59		
				$R^2 = .35^{***}$	
				95% CI[.23,.48]	
<u>Block 2 (gender, self-esteem)</u>					
(Intercept)	61.02***				
Self-esteem	-0.85***	0.13	-0.54		
Gender	-0.64	1.03	-0.05		
Depression	0.08	0.09	0.09		
Anxiety	0.03	0.06	0.05		
				$R^2 = .36^{***}$	$\Delta R^2 = .01$
				95% CI[.24,.48]	95% CI[-.02, .04]
<u>Block 3 (false self and self-esteem interaction)</u>					
(Intercept)	37.14***				
Self-esteem	0.05	0.39	0.03		
Gender	-0.78	1.01	-0.06		
Depression	-0.77	0.46	-0.86		
Anxiety	1.06	0.37	1.71		
Self-esteem:Depression	0.03	0.02	0.85		
Self-esteem:Anxiety	-0.04**	0.01	-1.60		
				$R^2 = .40^{***}$	$\Delta R^2 = .04^*$
				95% CI[.28,.52]	95% CI[-.02,.10]

Note. * indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$

Figure 1 *Moderation effect of anxiety on the relationship between self-esteem and false self*

Discussion

In this study, it was found that self-esteem was a predictor of depression, anxiety and false self. Given that it is unclear whether false self is a predictor of negative affectivity or rather is an outcome, in this direction - from negative affectivity to self-concept (Weir & Jose, 2010), false self was tested as both a predictor of negative affectivity and also as an outcome predicted by negative affectivity. By simple linear regression, it was found that false self was a positive predictor of depression, and anxiety, but if a self-esteem was included into the model, the false self was not as significant predictor of depression, and anxiety. Also the moderating effect of self-esteem on the relationship between false self and negative affectivity was not significant. However, a moderating effect of anxiety on the relationship between self-esteem and false self was found. A higher level of anxiety strengthens the relationship between low self-esteem and a higher level of false self. There was no moderation effect found in the context of depression.

Although false self as a part of self-perception appears should act as a predictor, false self could be also as an outcome in the context of self-esteem and negative affectivity (Weir & Jose, 2010; Michikyan et al., 2014). The results indicate a relationship between false self and negative affectivity, especially anxiety. In this context, false self is an outcome. This is contrary to some other theories which deal with false-self behavior (Higgins, 1987; Jack, 1991). Based

on the results of their work, Weir and Jose (2010) have suggested that it is necessary to consider which variable is actually an outcome. The current findings indicate that not only negative affectivity is important in this relationship, but that self-esteem is also important. Similar results have found Michikyan et al.(2014). Weir and Jose (2010) have also argued that anxiety and depression are likely to be strongly related. Therefore, higher depressive symptomatology could be due to higher anxiety. The results of the present study support these claims. According to these findings, anxiety play an important role in the development of false self, especially in the context of lower self-esteem. It seems that false self is related to both anxiety and depression and that the relationship between false self and depression could be mediated by the level of anxiety. A mediation model like this could be particularly valid in the context of lower self-esteem. However, these assumptions would need to be tested in further research.

Self-esteem is manifested in every situation where people present themselves and it is not easy to remain indifferent to information about yourself (Baumeister, Campbell, Krueger, & Vohs, 2003). Lower self-esteem in adolescents c is accompanied by higher levels of anxiety (Rosenberg, 1962; Sowislo & Orth, 2013). This can even occur in common situations where adolescents are not so sure of themselves. If adolescents evaluate their behavior as not being good enough for others or fail to believe in themselves, anxiety can lead them to choose a behavior that will give them appreciation and acceptance (Harter et al., 1996). Need for acceptance can act as a protect factor of victimization by peers (Card & Hodges, 2008). Adolescents with high rejection sensitivity can be desire for acceptance very strong. In a favor to reduce anxiety and be a member of some group they can admit “group behavior” which do not express their true self. In other words, false-self behavior (Harter et al., 1996). In the short term, appreciation from peers and acceptance of the group can reduce the anxiety caused by the situation. In this way, adolescents can saturate the need to be accepted by others. However, this acceptance as well as the reduction of anxiety are not caused by their true self and adolescents can be confused about what they should do next time. In the long term, the false self, and thus denial of their true self, could lead to incongruence (Rogers, 1959; Higgins, 1987; Moretti & Higgins, 1990). This is often manifested by increasing anxiety and the development of maladaptive processes (Côté, 2009).

When adolescents feel that their close ones do not accept who they really are, they choose false-self behavior (Harter, 2002). Therefore, lower self-esteem act as a predictor of anxiety (Swislo & Orth, 2013, Trzesniewski et al., 2006; Erol & Orth, 2011) and delinquency (Barry, Grafeman, Adler, & Pickard (2007). This can happen in making a decision in a group whether to drink or not. Adolescents are aware that this behavior is risky, illegal, against the rules and

that they risk losing confidence of parents. For adolescents with high self-esteem, refusing this offer is unlikely to be problematic because they value themselves sufficiently. In this context, they are willing to risk rejection by their peers. If adolescents' identity and autonomy are supported elsewhere, perhaps by family or other close people, the presentation of their true self in decision-making is not a problem even in the face of rejection. The formation of identity is one of the basic developmental tasks of an adolescent. Adolescents need to know who they are and who they should be (Arnett, 2006). However, if adolescents feel that their true self is not good enough for their close ones, they may seek acceptance elsewhere (Harter, Waters et al., 1997). This could happen in a group of other adolescents. Peers can influence adolescents problem behavior (Steinberg & Morris, 2001) by encourage them to behave in a way which is in contrast to their true self, e.g. against their true values (e.g. to take alcohol or drugs; illegal behavior; to break rules; to be rude; etc.). In these situations, adolescents with lower self-esteem and with a higher level of anxiety can choose a false self rather than a true self.

The current findings are consistent with Weir and Jose (2010) and contribute to a different perspective on the problematic behavior of adolescents. The results have shown themselves to be important in that false self can also be an outcome of negative affectivity, especially when the level of self-esteem is assessed. According to the present findings, this could be important in prevention as well as interventions focused on self-esteem and anxiety. Importantly, it is not only the level but the changes in the level of self-esteem which are important predictors of depression (Steiger, Allemand, Robins, & Fend, 2014).

The present results have shown that the level of anxiety moderates the relationship between self-esteem and false self, albeit only slightly. This indicate that if anxiety is reduced, the impact of self-esteem on false self could also be reduced. In interventions, it could of use to focus on what else besides the fear of rejection (in terms of the need to be accepted by others) could be a source of anxiety for adolescents. In adolescence, there are likely to be various situations which can lead to a higher level of anxiety (e.g., questions about own appearance; presenting one's own opinion, etc.) (Bernstein, Borchardt, & Perwien 1996). All these situations are linked closely to self-esteem and related self-perception (Harter, 1990). It is necessary to manage these situations in a way that adolescents experience a lower level of anxiety. The ability to manage these situations without increased anxiety could subsequently increase self-esteem and reduce false self. It seems that the relationships between false self, self-esteem and negative affectivity (especially anxiety) could work in a vicious circle. In other words, lower self-esteem could increase the chance of choosing false-self behavior and long-term functioning with false self could increase the degree of anxiety. A higher level of anxiety

produce discomfort in various social situations and at the same time, leads to a greater feeling of failure in these situations. This feeling of failure could lead to more dissatisfaction and this could ultimately lead to the reduction of self-esteem. This would not only lead to re-supporting false self but also to developing depressive symptoms. However, the functioning of such a vicious circle would need to be verified in future research.

On the other hand, it is important to pay attention on adolescent's behavior. In some cases also delinquency can be misunderstood as a behavioral disorder or personality disorder (relatively unchangeable) rather than something what can be reduced by right intervention. It can be a big mistake and also it can lead to a vicious circle of "bad decisions" in adolescents, with the impact on their future.

Limitations

In this study, other variables that could potentially cause anxiety in adolescents were not investigated. These could include classroom climate, relationships with peers, parents or the family situation. Another limitation is that negative affectivity was not measured over time. Due to the cross-sectional character of this study, it was a one-time data collection and it was not possible to determine how long the symptoms of negative affectivity had been or the other predictors of depression and anxiety either. For future research, it would also be useful to consider the issue of socially desirable answers which, given false self as a range of behavior in which the adolescents did not express their true self (Harter et al., 1996) could play a role in how the questions were answered. This could especially be the case in the negative questions.

Conclusion

Adolescence is an important developmental period in a person's life. It is during this time that adolescents build autonomy, form their own identity and try to figure out who they are. They face several questions and situations that are associated with the need to be accepted, belong somewhere or to fit in. In these situations, they can often feel confused and can deny being their true selves. Adolescents can choose false-self behavior in a favor to fit up when they are amongst others. This can be especially due to lower self-esteem and a higher level of anxiety. False self is source of negative affectivity (such as depression or anxiety) although the presence of negative affectivity may support the presence of false self. In the context of false self, self-esteem and negative affectivity, lower self-esteem plays an important role in the occurrence of false self. A higher level of anxiety have a negative impact on relationship between self-esteem and false self and a lower level of anxiety reduce this relationship.

Conflict of interest

Authors declare no conflict of interest.

Supplementary materials

Data, analytical script, and detailed measure descriptions can be found at:

<https://osf.io/beugt/>

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