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# Playfulness in Adolescence: An Initial Analysis of Social Behavior and Popularity in School

# [Giocosità in Adolescenza: Un'Analisi Iniziale del Comportamento Sociale e della Popolarità a Scuola]

Nancy Tandler<sup>1</sup>, René Proyer<sup>1</sup>

<sup>1</sup>Martin-Luther-University Halle-Wittenberg, Department of Psychology

E-mail: nancy.tandler@psych.uni-halle.de

#### Original article

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#### **ABSTRACT**

IT La giocosità è una variabile di differenza individuale che permette agli adolescenti di vivere e (re)interpretare situazioni della vita quotidiana come interessanti, divertenti e/o stimolanti. Ottantadue adolescenti (di età compresa tra i 15 e i 17 anni) hanno riferito sulla loro giocosità complessiva e su quattro sfaccettature di giocosità (orientata verso gli altri, spensierata, intellettuale, stravagante. Hanno inoltre nominato tre compagni di classe per ciascuna categoria: gradimento ("più/meno gradito") e popolarità ("più/meno popolare"). La giocosità spensierata e quella orientata verso gli altri giocano un ruolo importante nell'alto status sociometrico tra i compagni di classe. Gli adolescenti con un elevato livello di giocosità spensierata sono risultati più graditi dai loro coetanei e nominati meno frequentemente come "meno graditi". Gli adolescenti che hanno ottenuto un punteggio alto nella giocosità orientata verso gli altri sono risultati non solo più graditi dai loro coetanei, ma anche più popolari e meno inclini a essere considerati impopolari. Al contrario, la giocosità intellettuale e quella complessiva sono sembrate meno importanti per lo status tra i coetanei. È stato discusso il ruolo della giocosità negli aspetti sociali della vita degli adolescenti e i relativi esiti, considerando il benessere e la salute mentale degli adolescenti e le direzioni di ricerca future.

Parole chiave: giocosità, adolescenza, status sociale, popolarità, simpatia

Playfulness is an individual difference variable that enables adolescents to experience and (re)frame situations of everyday life as interesting, entertaining, and/or stimulating. Eighty-two adolescents (aged 15-17) reported on their overall playfulness and four facets of playfulness (other-directed, lighthearted, intellectual, whimsical). They also nominated three classmates for each category: likability ("like most/least") and popularity ("most popular/unpopular"). Lighthearted and other-directed playfulness play an important role in high sociometric status among classmates: Adolescents high in lighthearted playfulness were more liked and less frequently nominated as least liked by their peers. Adolescents who scored high in other-directed playfulness were not only better liked by their peers but also more popular and less likely to be considered unpopular. Conversely, intellectual and global playfulness seemed to be less important for peer status. We discuss playfulness' role in social aspects of adolescents' lives and related outcomes, considering adolescents' well-being and mental health, and we discuss directions for further research.

**Keywords**: playfulness, adolescence, social status, popularity, likeability

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## 1. Playfulness in Adolescence: An Initial Analysis of Social Behavior and Popularity in School

"Man plays only where he is man in the full meaning of the word, and he is only fully man where he plays" (Schiller, 1794, p. 30). In his Aesthetic Education of Man, the famous German poet and playwright Friedrich Schiller described the play instinct (Spieltrieb) as an essential human activity. Although research on play as a directly observable behavior has a comparatively long history (e.g., in developmental psychology), the associated personality trait of playfulness has only recently gained attention. Most research on playfulness has focused on children, showing positive associations with key aspects of children's emotional adjustment such as self-confidence (Barnett, 1991), positive affect (Singer et al., 1980), and adaptive coping (Saunders et al., 1999). Playfulness has also been linked to higher levels of children's divergent thinking (Barnett & Kleiber, 1982) and imagination (Lieberman, 1977), as well as positive play interactions with peers (Fink et al., 2020). Recent research has also studied playfulness in adults, finding positive associations with adults' physical health and well-being (e.g., Farley et al., 2021; Proyer et al., 2018, 2019), performance-related outcomes such as intrinsic goal orientations (Proyer, 2012a), university exam performance (Proyer, 2011), job-related performance (Tandler & Proyer, 2018), and establishing and maintaining satisfying social relationships (e.g., Aune & Wong, 2002; Brauer et al., 2021). However, the role of playfulness in adolescence remains relatively understudied. A recent study (Proyer & Tandler, 2020) found positive associations between adolescents' general life satisfaction, as well as satisfaction with the self and friends. In girls, playfulness was also associated with higher levels of peer-nominated bullying behaviors and victimization status. Although these findings provide some insight into the role of playfulness in adolescents' social lives, more research is needed in this area, given the importance of peer interaction and social group membership for identity formation, a key developmental task of adolescence (Erikson, 1968; Rubin et al., 2006; Branje et al., 2021), for well-being and self-esteem (Webster et al., 2021), and for dealing with stressful life events (McMahon et al., 2020).

## 1.1 Playfulness

Playfulness in adolescents is an individual difference variable that is relatively consistent across time and situations, and it was suggested that "playfulness as a quality of play would developmentally transform itself into a personality trait of the player in adolescence and adulthood" (Lieberman, 1977, p. 23). A recent attempt to define *playfulness* in adults, which can also be extended to adolescents, is: "an individual differences variable that allows people to frame or reframe everyday situations in a way such that they experience them as entertaining, and/or intellectually stimulating, and/or personally interesting" (Proyer, 2017, p. 114). This definition is consistent with a structural model that includes four different playfulness facets, including *other-directed* (i.e., using one's playfulness to enjoy social interactions and to cheer up social

situations), *lighthearted* (i.e., an easy and spontaneous approach to life, not worrying too much about future consequences), *intellectual* (i.e., liking to play with ideas, trying different solutions for a problem, preferring complexity over simplicity), and *whimsical* (i.e., having a preference for extraordinary people and things, a preference for breaking ranks; OLIW\_Youth-model; Proyer, 2017; Proyer & Tandler, 2020). The OLIW\_Youth-model is akin to the OLIW model which was derived for adults through a multi-method approach (e.g., using qualitative techniques, Proyer, 2014a; factor-analytic studies, Proyer & Jehle, 2013; psycho-linguistic analyses, Proyer, 2014b).

Research on adolescents using the OLIW\_Youth framework has already found associations of playfulness with higher levels of intrinsic goal orientations, with lower levels of trait anxiety, and playfulness overlaps with the Big Five personality traits (Proyer & Tandler, 2020). There seems to be a cultural as well as a genetic contribution to playfulness, and although its heritability is not yet fully understood, genetic studies (Olsen et al., 2001) suggest a genetic contribution of 0.30 ( $a^2$ ) and a non-shared environmental contribution of 0.70 ( $e^2$ ). Results of studies suggesting a parental (e.g., Shen et al., 2017; Tandler & Proyer, 2022) and cultural impact (e.g., Pang & Proyer, 2018) support this suggestion.

#### 1.2 Social Status

Social status, reflecting an individual's social position within their peer group (Rubin et al., 2006), assumes increasing importance during adolescence and is actively pursued by adolescents (Li & Wright, 2014). This multidimensional construct encompasses two main dimensions: peer likeability and peer popularity. Peer likeability refers to the extent to which adolescents are liked or preferred by their peers, typically assessed through "like most/least" nominations (Coie et al., 1982). Peer popularity is characterized by adolescents' social visibility, social power, and social prominence within their peer group, typically assessed through peer nominations on "who is popular/unpopular" (Cillessen et al., 2011).

While peer likability and popularity are positively correlated in adolescents, they exhibit distinct associations with behavioral outcomes, and this correlation weakens compared to middle childhood (Cillessen & Mayeux, 2004). Given the substantial increase of depressive symptoms (Lewinsohn et al., 1993) and antisocial behavior (see Moffitt, 1993) during adolescents, aspects of peer status appear to play a particularly important role due to these associations. Peer likability, as measured 2 years prior, has been shown to predict the severity of depressive symptoms in adolescents (Kiesner, 2002). Additionally, lower levels of peer likeability have been linked to higher levels of social anxiety (Inderbitzen et al., 1997). Students who are well-liked by their peers are typically characterized as cooperative, prosocial, less aggressive, and academically competent (e.g., Asher & Coie, 1990; Parkhurst & Hopmeyer, 1998). In contrast to well-liked adolescents, popular adolescents exhibit a combination of positive and negative traits: While they often display positive characteristics such as RISU 7(2) (2024), pp. 65-80

social centrality and prosocial tendencies (Cillessen & Mayeux, 2004), they may also engage in negative behaviors such as relational aggression, dominance, and manipulation to maintain their social status (Farmer et al., 2003). In the context of bullying behaviors during adolescence, individuals who bullied, reinforced, or assisted bullies were highly popular but less liked. Conversely, individuals who were victimized were highly disliked and unpopular. Notably, defenders of the victims were liked, but only had average popularity (Pouwels et al., 2016). In terms of school engagement, both likeability and popularity predicted less future behavioral engagement (i.e., adolescents' effort, attention, and persistence considering learning activities; Skinner et al., 2008) over a period of 4 years (Engels et al., 2016). The latter may be explained by the fact that individuals try to conform with group norms in order to maintain their status.

Peer likability and non-likability appear to be relatively stable over time. Bukowski and Newcomb (1984) conducted a longitudinal study, tracking students' peer status over a 6-month period. Despite significant changes in class and school environments, the study found stability coefficients for being liked (r = .78) and for being disliked (r = .74). Despite changes in the social environment, peer status seems to be a relatively stable individual characteristic. This raises the question of whether (and if so, which) internal factors contribute to the formation of adolescents' peer status. For example, research has shown that inner factors such as the Big Five personality traits extraversion and emotional stability are positively associated with peer-rated likability and popularity (Van der Linden et al., 2010). Given the importance of the social environment in adolescents' peer status, a personality characteristic that better focuses on the social aspect than the more general factors of the Big Five personality system might be helpful in gaining a deeper understanding of the role of factors within individuals in explaining adolescents' social status. Considering the importance of playfulness in elucidating social aspects of adolescents' lives (including bullying behaviors), we anticipated that playfulness would play a crucial role in comprehending peer status among adolescents (Proyer & Tandler, 2020). To the best of our knowledge, this was the first and initial study directly testing these associations in adolescents.

## 1.3 The Present Study

The main aim of this study was to test the associations between adolescents' overall playfulness and its facets, and the indicators of peer status such as likeability and popularity. Furthermore, we aimed to determine whether playfulness exhibits a distinct pattern across the different peer status groups as defined by Coie et al. (1982).

Overall, we expected that playfulness in adolescence relates to greater likeability and popularity. This is mainly driven by earlier research with younger children (Barnett, 2018) and research on positive outcomes of playfulness across different age groups. In short, one might argue that playful adolescents are fun to be around—they are able to do unexpected things, may be more lighthearted, may be able to RISU 7(2) (2024), pp. 65-80

have unusual and exciting ideas, and be able to cope with stress in an effective way. Given that play and playfulness have the potential to elicit positive emotions, positive effects were expected for the playful adolescent as well as their peers. Also, these might be helpful in initiating and facilitating social bonds, which may be a strength of the playful adolescent.

#### 2. Method

#### 2.1 Procedure

We recruited our participants from a local school register, and their school administrations were contacted for approval. We collected the data in classrooms during regular school hours. Group sessions began with students providing demographic information, followed by questions pertaining to sociometric status. Finally, students completed some playfulness questionnaires. Participation was voluntary, no compensation was offered, and parental consent was obtained. In line with the ethical guidelines and the guidelines of good research practice in Germany, parental consent was needed because our participants were below the age of 18 years and, therefore, considered minors. The testing took approximately 30 minutes. Anonymity was guaranteed by using only numbers for each student and the numbers were not connected to names or other personal data. After the testing, students were given the opportunity to ask questions concerning the study. After two months, we went back to the school to present the results of the study. No individual feedback was presented.

### 2.2 Sample

Our sample consisted of 82 students whose age ranged from 15 to 17 years (M = 16.09, SD = 0.59), with 56 (68.3%) female and 26 (31.7%) male students. These students were from four classes spanning two secondary schools in eastern Germany. Class sizes varied, ranging from 14 to 26 students (M = 20.5 students per class, SD = 4.93). In sum, 82 (87.2%) out of 94 students being enrolled in the four classrooms participated in our study. Notably, teachers reported student absences due to illness or lack of parental consent in certain classes.

#### 2.3 Measures

#### 2.3.1 Sociometric Status Assessment

We determined peer status with participants seated in a circle. Each adolescent was assigned a number placed in front of them. For likeability assessment, participants nominated three peers they "like most" (LM) and three peers they "like least" (LL). Popularity scores were obtained by nominating three peers perceived as "most popular" and three as "least popular." Then, these four scores underwent *z*-RISU 7(2) (2024), pp. 65-80

standardization to control for the number of students in each class. Social preference (SP) for each individual was computed by subtracting the z-standardized numbers of having been nominated by peers as LL from the LM peer nominations (Coie et al., 1982). Similarly, popularity was determined by subtracting the z-standardized numbers of peer nominations as "least popular" from the "most popular" nominations (Cillessen et al., 2011). We categorized adolescents into five social status groups based on the z-standardized scores derived from the likeability peer nominations (in line with the proposal by Coie et al., 1982). Adolescents of the *popular group* had SP scores greater than 1.0 (LL scores less than 0 and LM scores higher than 0). Those in the *rejected group* had less than -1.0 (LL scores greater than 0 and LM scores less than 0). Neglected adolescents scored on social impact (SI = LL + LM) less than -1.0. Adolescents of the *controversial group* had SI scores greater than 1.0 (with both LM and LL scores greater than 0). Finally, adolescents in the *average group* did not meet the criterion of the four groups. Table 1 provides an overview of the distribution across class, gender, and age.

Table 1 Distribution of the sociometric status groups (according to Coie et al., 1982) in absolute numbers and across gender, age, and classrooms

Sociometric sta	atusN	Gender		Age in M (SD)	Composition in the 4		
group		Female	male	<del>_</del>	classrooms		
Popular	25	76%	24%	16.04 (0.61)	1: 23%		
					2: 38%		
					3: 29%		
					4: 36%		
Rejected	18	78%	22%	16.17 (0.62)	1: 12%		
,				,	2: 29%		
					3: 29%		
					4: 21%		
Neglected	12	50%	50%	15.92 (0.29)	1: 27%		
				,	2: 10%		
					3: 10%		
					4: 7%		
Controversial	6	50%	50%	15.83 (0.75)	1: 12%		
				,	2: 5%		
					3: 5%		
					4: 7%		
Average	21	67%	33%	16.24 (0.63)	1: 27%		
S				,	2: 19%		
					3: 29%		
					4: 29%		

Notes. Adolescents age varied between 15 and 17 years.

To further validate our social status measures, we also asked participants to report the number of their close friends, allowing them to include individuals both within and outside the class. Adolescents, on average, reported having 9 to 10 friends (M = 9.71, SD = 6.40, range: 1–35).

#### 2.3.2 Students' Self-Reported Playfulness

We assessed students' overall playfulness in the sense of a high intensity and an easy onset of playful experiences combined with the frequent display of playful activities by using the Short Measure of Adult Playfulness (SMAP; Proyer, 2012b). The instrument contains five items (e.g., "I am a playful person"), and answers are given on a 7-point scale (1 "strongly disagree" to 7 "strongly agree"). The internal consistency was Cronbach's alpha .79.

Adolescents' playfulness was additionally assessed using a more fine-grained instrument, the OLIW\_Youth (Proyer & Tandler, 2020), which measures playfulness per four facets, namely, other-directed (O; e.g., "Among my clique/circle of friends, I have a reputation for joining in every fun thing"), lighthearted (L; e.g., "Many people take their lives too seriously; when things don't work, you just have to improvise"), intellectual (I; e.g., "If I have to learn something new under time pressure, I try to find a playful way to think about the topics—this helps me learn"), and whimsical (W; e.g., "I do not generally like to allow myself to be categorized and have my own style in many respects"). The version of the OLIW\_Youth used in this study contains 21 items utilizing a 7-point scale (1 "strongly disagree" to 7 "strongly agree"). The internal consistencies for the four facets were: O = .55 (six Items), L = .61 (six items), I = .43 (three items), and W = .72 (six items).

#### 3. Results

## 3.1 Preliminary Results

Means and standard deviations of the OLIW\_Youth measure and the SMAP, their intercorrelations, and their associations with age and gender, are given in electronic supplementary material (Table ESM A). There was moderate convergence among the playfulness scales. Although the demographic variables only had minor effects (rs = .00-.22) on youths' playfulness scores (OLIW, SMAP) and no significant effects on indicators of the sociometric status (age: rs = .06-.16, all ps > .16 and gender: rs = .00-.13, all ps > .24), we computed partial correlations controlling for potential effects of age and gender in the following analyses. Also, there were no age (F[4, 77] = 0.99, p = .42) or gender differences ( $\chi^2(4) = 4.24$ , p = .37) across the social status groups.

#### 3.2 The Relationship Between Playfulness and Indicators of Social Status

Table 2 gives the associations between playfulness and the indicators of the sociometric status (partial correlations, controlled for students' age and gender). Among the playfulness facets, O (other-directed) and L (lighthearted) playfulness showed the numerically strongest correlations with indicators of the sociometric status (unique shared variance: 6-17%). The numerically most substantial association

observed was between being most liked and lighthearted playfulness. Those students with greater lighthearted playfulness were both more liked and less frequently designated as least liked by their peers, a pattern reflected in the positive correlation with social preference. Furthermore, there was a trend indicating that lighthearted students were also less likely to be perceived as unpopular. Other-directed students similarly garnered more positive regard from their peers, being more liked and, additionally, more popular while being less unpopular. This positive association also extended to their popularity index. On the other hand, whimsical students did not exhibit associations with positive sociometric indicators, such as being liked or perceived as popular. Conversely, intellectual playfulness seemed to be less important for sociometric status among classmates. Also, no significant correlations were found for global playfulness, and the amount of unique shared variance remained negligible (.01–.03).

Table 2. Means, standard deviations, and correlations between self-reported playfulness and indicators of the social status likeability and popularity controlled for age and gender

	О	L	I	W	$R^2/\Delta R^2$	SMAP
Most liked	.32**	.33**	.12	01	.19/.17	.17
Least liked	.02	24*	06	01	.08/.06	13
Social preference	.18	.35**	.11	.00	.16/.13	.18
Most popular	.30**	.16	06	10	.15/.12	.16
Least popular	25*	21+	08	.21+	.12/.12	10
Popularity	.33**	.22+	.01	19 <sup>+</sup>	.17/.15	.15
$R^2/\Delta R^2$	.22/.19	.13/.13	.06/.03	.13/.08		.05/.04

A similar pattern was found for our additional social measure: the number of self-reported friends. The quantity of self-reported friends was positively related with adolescents' lighthearted playfulness (r = .23, p = .04) and negatively with their whimsical playfulness (r = -.25, p = .03). Additionally, a trend indicated a positive correlation between other-directed playfulness and the number of friends (r = .21, p = .07), while no associations were obtained for intellectual and global playfulness.

## 3.3 The Relationship Between Playfulness and Sociometric Status Group

To analyze potential differences in playfulness' distribution across social status groups, we computed ANOVAs with the status groups rated by the classmates as a grouping variable and the playfulness facets along with the overall playfulness score (SMAP) as dependent variables. There were no mean level differences in overall scores (F[4, 77] = 1.39, p = .25) or facets of playfulness: O (other-directed; F[4, 77] = 2.29, p = .07), L (lighthearted; F[4, 77] = 1.74, p = .15), I (intellectual; F[4, 77] = 1.06, p = .38), and W (whimsical; F[4, 77] = 0.68, p = .61). Thus, the scores on playfulness scales did not vary across assigned roles.

#### 4. Discussion

Does playfulness in adolescence go along with higher peer status? In short, the answer from this initial study is "yes." Our main finding was that adolescents high in playfulness enjoyed greater likability and were more favorably regarded (popularity) by their peers. In particular, the facets other-directed and lighthearted playfulness played an important role in a higher peer status. Conversely, adolescents characterized by high levels of whimsical playfulness were, in trend, perceived as less popular among their peers. These findings largely align with our assumptions. While causality cannot be definitively inferred from our analyses, the strength of our results lies in the73dventage of drawing data from diverse sources of information, including both self-reports and peer perceptions, converging well with the relational pattern of our additional social measure—the number of self-reported friends with playfulness.

## 4.1 Playfulness' Role in Adolescents' Social Status

Our findings fit well with prior research investigating the role of playfulness in social aspects of adolescents' lives. Our results indicate a connection between whimsical playfulness in youth and adverse social outcomes. Specifically, there was a correlation between higher levels of self-reported whimsical playfulness and bullying behaviors and victimization status as reported by peers in Proyer and Tandler (2020). The results further indicate the distinctive impact of other-directed and lighthearted playfulness on adolescents' peer perceptions. Adolescents who self-report high playfulness seemed to be judged more positively by their classmates and appeared to be more likeable. One potential explanation is that adolescents that are thriving in school might be perceived as less likable and less popular among their peers, as suggested by previous research (Engels et al., 2016). Adolescents high in other-directed and lighthearted playfulness may not necessarily be deeply engaged in thriving in school as they, for example, were not associated with learning or achievement motivation (Proyer & Tandler, 2020). This seems important, as these motivational components relate to academic achievement (Elliot & McGregor, 2001). Adolescents geared towards other-directed playfulness seem to avoid schoolwork. This insight may

contribute to understanding why adolescents with high levels of whimsical playfulness are perceived as less popular by their peers. Prior studies have already demonstrated a positive correlation between whimsical playfulness and aspects of academic striving, such as learning motivation and school performance (Tandler & Proyer, 2018). This might imply that while whimsical playfulness may not be as socially favored, it might coincide with greater dedication to educational pursuits, scholastic curiosity, and a more positive academic orientation, the latter probably in the sense of a liking of unusual and potentially new and innovative ideas and thoughts that could advance knowledge generation.

Our findings indicate that adolescents' intellectual playfulness exhibited a relatively weak connection with likability and popularity among peers. This lack of association parallels similar results found in adolescents for the Big Five personality trait of openness to experience and being liked (r = .06) or seen as popular (r = .04) by peers (Van Linden et al., 2010). Among the Big Five personality traits, intellectual playfulness had the strongest overlap with openness to experience (Proyer & Tandler, 2020). Intellectual playfulness might not be recognized by peers when nominating likable and popular individuals. Likely, the distinctive characteristics of an intellectually playful adolescent may manifest primarily on a cognitive level (e.g., liking to play with ideas, preferring complexity over simplicity, or trying various solutions for a problem; Proyer, 2017). It is plausible that these cognitive tendencies are more internalized and may not have a pronounced impact on outward social behaviors or interactions. In the future, it would be interesting to study these cognitive processes in more detail and see which of these are associated with indicators of functioning in a social group.

#### 4.2 Limitations

The present study has two major limitations: First, our study's correlational cross-sectional designs limits interpretations about the causality of the findings. Future research should include longitudinal data. However, it is noteworthy that earlier studies (e.g., Bukowski & Newcomb, 1984) indicated that environmental changes may not robustly alter peers' social status. This implies that the foundations of social status might be more deeply rooted within the individual rather than being substantially influenced by external indicators or alterations in the social environment. This also invites future research on playfulness and possible interactions with changes in social status. Second, to assess facets of adolescents' playfulness, we used an initial version of the OLIW\_Youth measure (Proyer & Tandler, 2020), which demonstrated low internal consistencies for some facets (e.g., intellectual playfulness). Hence, a replication and extension of the study with the current version of the scale will be needed. Also, a previous study (Barnett, 2018) on playfulness' role in popularity in primary school students pointed out potential gender differences. In contrast, we did not find gender differences. Future studies should still take probable gender differences into account, especially in relation to other age groups or alternative RISU 7(2) (2024), pp. 65-80

measures of social status. Finally, given that our study was a first attempt at studying playfulness' role in adolescents' social status, our sample size is rather small and some of our associations are not yet robust enough and require replication (e.g., global playfulness). Understanding how playfulness may intersect with gender dynamics across various contexts can contribute to a more nuanced comprehension of the factors influencing social dynamics in diverse populations.

#### 4.3 Conclusion

The present study outlines the role of adolescents' playfulness in shaping their social status, particularly in terms of being liked and perceived as popular by their peers. Overall, adolescents high in other-directed and lighthearted playfulness experienced higher likability, were less likely to be judged as least liked, and were both more frequently regarded as most popular and less often as least popular by their classmates. Our results complement the current research on playfulness' role in social status, where playfulness among boys in the second half of primary school (grades 3 and 4) was negatively related to being perceived popular and positively by teachers and classmates, and playful boys were instead judged as class clowns, while no such associations were found for girls' playfulness (Barnett, 2018). Our results are promising in the sense that playing and being playful seem to be rather beneficial than adverse across the lifespan. Specifically, the positive social outcomes observed in adolescents, where success in achieving peer acceptance is associated with immediate advantages like access to potential mates and increased social support (e.g., Cillessen & Rose, 2005). In this sense, playfulness may be beneficial and a protective factor against vulnerabilities (Cowen et al., 1973). Future research hopefully reveals whether it not only contributes to immediate social advantages but also to long-term well-being and positive mental health outcomes.

#### **APPENDIX**

ESM A
Means, Standard deviations, and Intercorrelations between playfulness, gender and age

Variable	M (SD)	O	L	Ι	W	SMAP
О	4.89 (0.84)					
L	4.30 (0.98)	.22*				
I	3.75 (0.78)	.17	.27*			
W	4.38 (0.96)	27*	.03	.08		
SMAP	4.30 (1.01)	.50***	.29**	.13	.17	
Age	16.09 (0.59)	12	04	.07	.04	07
Gender		11	00	.16	.22*	02

Note. N = 82. Age in years, Gender: 0 = male, 1 = female. SMAP (Short Measure of Adult Playfulness) = Global Playfulness. O = Other-directed. L = Lighthearted. I = Intellectual. V = V whimsical. V = V of V =

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#### **Bionotes**

#### Nancy Tandler

Dr. Nancy Tandler is a postdoctoral researcher in Prof. Proyer's lab at the Martin-Luther-University Halle-Wittenberg. Her main interest is the role of adolescents' playfulness in explaining well-being, social status and educational outcomes.

#### René Proyer

Prof. Dr. René Proyer is a full professor of Psychological Assessment and Differential Psychology at the Department of Psychology at the Martin-Luther-University Halle-Wittenberg. He is mainly interested in the study of individual differences variables (e.g., playfulness, creativity) that contribute to positive psychological functioning.