

## **The Association between Teacher Acceptance and Sense of Authenticity as Mediated by Peer Acceptance in Japanese Adolescent Boys and Girls**

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Adolescents' sense of authenticity is a pervasive urge in positive youth development. Empirical evidence on the correlates of adolescents' sense of authenticity in the school settings is still scarce. This study examined the relationship between teacher acceptance and a sense of authenticity in adolescent students, as mediated by peer acceptance. A total of 603 Japanese junior high school students (61% boys;  $M_{age} = 13.95$  years,  $SD = 0.85$ ) responded to the Child version of Teacher Acceptance-Rejection Questionnaire (Child TARQ), the Peer Acceptance Scale, and the Sense of Authenticity Scale. The structural equation modeling analyses showed that teacher acceptance contributed to students' sense of authenticity directly, and peer acceptance partially mediated this relationship. These relationships were invariant across adolescent boys and girls. Our findings suggest that increased attention, care, nurturance, and support from teachers can lead to more peer acceptance in school, which in turn promotes adolescents' sense of authenticity. These findings provide useful indications for school professionals and the design of intervention programs for adolescents.

*Keywords:* teacher acceptance, sense of authenticity, peer acceptance, gender

Adolescence is a period when an individual develops a sense of authenticity—the sense of being true to one's core self, which is an indicator of optimal psychological functioning (Ito & Kodama 2005; Thomaes, Sedikides, van den Bos, Hutteman, & Reijntjes, 2017). Although an emerging body of literature highlights the importance of schools in influencing adolescents' outcomes and as well as promoting psychological strength (Demir & Leyendecker, 2018; Hughes & Im, 2016) but the role of schools in the development of a sense of authenticity in adolescent students has not been studied in adolescent

psychology research (Orikasa & Shoji, 2017; Thomaes et al., 2017). Findings from such kind of studies can contribute to understanding how interventions can be developed for the optimization of psychological strength and potentialities among young students in addition to their better academic outcomes.

Teachers are important adult figures who form an essential part of the school environment and influence students' psychological adjustment and mental health (Rohner, 2010; Erkman, Caner, Hande Sart, Börkan, & Şahan, 2010) by fostering or

inhibiting the expression of the ‘true self’ among students. They also play a significant but invisible role in shaping their students’ peer relations (Farmer, Lines, & Hamm, 2011; Hughes & Im, 2016). Positive or negative relations with peers may influence adolescents’ self-esteem and self-acceptance (Birkeland, Breivik, & Wold, 2013). However, currently, empirical studies considering the concurrent associations among teacher acceptance, peer acceptance, and sense of authenticity for adolescent students remain scarce. The present study aims to probe these relationships through a mediation model.

For this study, the Interpersonal acceptance-rejection theory served as a theoretical and methodological basis (we used this theory-based Teacher Acceptance-Rejection Questionnaire, TARQ; Rohner, 2005a). Interpersonal acceptance and rejection are the two ends of the warmth dimension of interpersonal relationships. Acceptance refers to the warmth, liking, support, care, benefaction, concern, or love that a person expresses to or experiences from others. Rejection refers to the significant pullout of these positive feelings and behaviors and the presence of a variety of physically and psychologically painful acts and affects. Interpersonal acceptance-rejection is a continuum on which all humans can be positioned, as everyone experiences more or less care, support, and love from the people who are most important to them (Rohner & Lansford, 2017). This theory posits that perceived teacher acceptance-rejection in terms of warmth/ affection, hostility/ aggression, indifference/ neglect, and undifferentiated rejection significantly influence students’ psychological well-being and functioning in the same way as parental acceptance-rejection does (Ali, Khaleque, & Rohner, 2015; Rohner, 2010, 2019). A growing body of research, based on IPARTheory strongly suggests that positive teacher-student relationships

(teacher acceptance) have a significant influence on the development of students’ self-concept, self-adequacy (Ali et al., 2015; Erkman et al., 2010), but how the sense of authenticity among students is influenced by teacher acceptance-rejection still a matter of investigation.

### **Sense of Authenticity**

Broadly influenced by Harter’s (2002) concept of authenticity and Kernis’s (2003) theoretical conceptualization of ‘optimal self-esteem, Ito and Kodama (2005) defined *sense of authenticity* in a very simplified way. “One’s sense of being true to one’s core self” is referred to as sense of authenticity (Ito & Kodama, 2005). It is considered as the foundation of the optimal facet of self-esteem characterized by a number of features associated with genuine, true, stable, and congruent high self-esteem (Kernis, 2003; Kernis & Goldman, 2006). A sense of authenticity or subjective authenticity is seen as the essence of positive psychological functioning and healthy psychological growth and development (Di Fabio & Palazzeschi, 2015; Kernis & Goldman, 2006; Orikasa & Shoji, 2017). Departure from it is observed as increasing psychopathology (Wood, Linley, Maltby, Baliousis, & Joseph, 2008). A previous study suggested that a sense of authenticity is associated with better mental health and subjective well-being, and a higher level of self-actualization (Thomaes et al., 2017). A greater sense of authenticity is associated with positive interpersonal affairs and interactions (Baker, Tou, Bryan, & Knee, 2017).

### **Teacher Acceptance and Adolescents’ Sense of Authenticity**

The personality sub-theory of IPARTheory predicts and explains the major personality and psychological outcomes of perceived interpersonal acceptance and rejection. Individuals have a biologically based emotional need for a positive response from

an attachment figure or significant other (Rohner, 2019; Rohner & Lansford 2017). Children may also be attached to nonparental figures in adolescence; as suggested by this theory, significant others, including teachers, who are uniquely essential to the individual, are a culturally invariant powerful motivator for children's psychological growth (Ali et al., 2015; Rohner 2005b). This theory emphasizes that warm relations with a teacher in adolescence contribute to thriving. Contrarily, a rejected adolescent (e.g., who experiences hostility/ aggression, lack of affection, or neglect) develops impaired self-esteem and impaired self-adequacy and negative self-feelings and negative mental representations of the self (Rohner, 2019; Rohner & Lansford, 2017). Kernis and Goldman (2006) suggested that significant adults' feedback and care satisfy individuals' psychological need that helps to develop authenticity. In a cross-cultural meta-analysis, Ali et al. (2015) claimed that perceived teacher acceptance has a significant strong relation with adolescent students' self-reported psychological adjustment, including self-esteem and self-adequacy.

### **Teacher Acceptance and Peer Acceptance**

Students' relationships with teachers and peers are embedded in the same context. Farmer et al. (2011) referred to teacher influence on peer relations as "the invisible hand." During instructional and noninstructional everyday conversations, communications, teacher-student interactions serve as important indicators that guide how students perceive their peers. In longitudinal studies, among young children, it was found that teachers' warmth and conflict/rejection behaviors with students were accountable for influencing peer perceptions of liking and disliking (Hughes & Im, 2016). Children accept or reject their peers in a similar way as their teachers do. According to IPARTheory, an

individual's mental representation is constructed from experiences with an emotionally significant person (e.g., experience with teacher) and shapes the way individuals perceive, interpret, and react to new experiences about self and other social relationships (Rohner, 2005b). Several findings have shown that positive and supportive relationships with teachers promote a more secure base of attachment with the school and enhance a sense of belongingness and connectedness among adolescents that in turn leads to more positive perceptions of peers at school (Demir & Leyendecker, 2018; Walsh, Harel-Fisch, & Fogel-Grinvald, 2010).

### **Peer Acceptance and Adolescents' Sense of Authenticity**

During early adolescence, young people begin to shift their focus to their peers, spend an increasing amount of time together, and seek social acceptance. Acceptance from peers becomes a salient source of support and approval that positively stimulates young adolescents' self-esteem, self-worth, and psychological adjustment. In addition to making adolescents feel safe and more adaptable in the school context, a supportive relationship with peers can provide adolescents with an environment that is crucial for better mental health and psychological growth (Birkeland et al., 2013). Peets and Hodges (2018) showed that adolescents who feel more authentic have more positive self-perception, are less lonely at school and are more satisfied with their peer relationships.

### **Teacher and Peer Acceptance and Japanese Adolescents' Sense of Authenticity**

A previous study showed that perceived teacher support was negatively related to perceived social rejection by peers, and that perceived social rejection by peers was negatively related to the mental well-being

of Immigrant and Israeli adolescents (Walsh et al., 2010). As satisfaction of the need for positive response (acceptance) from significant others facilitates the construction of a positive representation of the self, and sense of authenticity (Kernis & Goldman 2006; Rohner & Lansford, 2017), therefore, it could be assumed that perceived teacher acceptance will be associated with perceived peer acceptance, and that perceived peer acceptance could be associated with adolescents' sense of authenticity.

In this study, we are interested in Japanese adolescents as they employ considerably more time with peers and teachers in school, compared to other countries (Trembl, 2001). Moreover, the Japanese educational system is mainly teacher-centered (Fukuzawa, 1994). Students' emotional and psychological health mostly depends on their relationship with their teachers (Mizuta, Suzuki, Yamagata, & Ojima, 2017). Recently, an issue of concern for Japan is that middle school students' self-esteem is decreasing (Ogihara, 2016). This study, through investigating the association between teacher acceptance-rejection, peer acceptance, and Japanese middle school students' sense of authenticity may stimulate future studies for identification of major antecedents for lowering middle school students' self-esteem and may contribute to the development of intervention programs for optimizing adolescent students' potentialities. Besides, teacher acceptance-rejection has never been studied in the context of Japan, from the perspective of IPARTheory. This study may contribute to extend IPARTheory in a cross-cultural setting.

Gender is a salient contributor to young adolescents' perceived social relationships. Summarizing the findings of cross-cultural studies conducted in six countries, Rohner (2010) reported that teacher acceptance

independently predicted both boys' and girls' psychological adjustment and personality dispositions in only two countries among the six countries. However, later, Ali et al. (2015) claimed in the findings of a meta-analysis that teacher acceptance was significantly correlated with youth's psychological functioning across genders. The effect of teacher warmth and conflict on peer liking or disliking was observed to be similar for both girls and boys (Hughes & Im, 2016).

### **The Current Study**

Considering the major tenets of IPARTheory and empirical premises discussed above, it was hypothesized that perceived teacher acceptance-rejection would be associated with a sense of authenticity in Japanese adolescents (hypothesis 1). The distinctive collectivistic sense and social harmony in Japanese culture significantly influence teacher and peer relationships (Bear, Chen, Mantz, Yang, Huang, & Shiomi, 2016; Kato & Magari, 2017). Students are very respectful to teachers in the same way as to their parents, and they deeply internalize teacher's deeds (Bear et al. 2016) that potentially guide how they perceive their peers. Therefore, we expected that teacher acceptance-rejection significantly associated with peer acceptance (see Hughes & Im, 2016), and that peer acceptance in turn also be associated with the sense of authenticity of Japanese adolescents, i.e., peer acceptance would mediate the link between teacher acceptance-rejection and a sense of authenticity (hypothesis 2). As we could not find any studies related to gender moderating the relations between Japanese adolescents' feelings about their teachers and peer acceptance, and sense of authenticity, we made no specific hypotheses about the moderating effects of adolescents' gender.

## Method

### Participants

Eight hundred sixty-nine Japanese junior high school students were primarily recruited online throughout Japan, consulting a Japanese research company (see the procedure for details). We excluded 216 participants for giving incorrect responses in the three random attention check items (e.g., “To show that you are reading this sentence carefully, please select the option *almost never true*,”) and 50 respondents for withdrawal of consent. Thus, the final sample comprised of 603 Japanese adolescents (61% boys) between the age of 12 and 15 years of old ( $M_{\text{age}} = 13.95$  years,  $SD = 0.85$ ). Participants were students of the first through third grade in junior high schools.

### Procedure

Ethical approval was granted from the authors' affiliated graduate school before the commencement of the study. We collected data through a research company, NTT Com Online Marketing Solutions Co. Ltd. (<https://www.nttcoms.com/>). First, the company advertised online the link of the survey for parents who were company monitors and informed them about the aim and detailed protocol of the study. Parents who agreed for their children's participation obtained a URL link of the questionnaire and were requested to forward it to their children. Later, the children who accessed the link were also informed about the study along with the ethical details, only who gave assent participated in the study.

### Measures

Participants answered to the following three self-report questionnaires, including a personal information form (PIF) that yielded demographic information (e.g., age, sex, grade in school).

### The Child Version of Teacher Acceptance-Rejection Questionnaire (Child TARQ: Short-Form)

A 24 item self-report questionnaire (Rohner 2005a) was applied to measure children's reflection of the level of acceptance and rejection they experience from the teacher to whom s(he) feels more attached in school. This measure consists of four subscales: (a) Hostility/aggression (6 items), (b) indifference/neglect (6 items), (c) undifferentiated rejection (4 items) and (d) warmth/affectionate (8 items). The later subscale was reversely scored to indicate coldness/lack of affection. Items are scored on a 4-point Likert-type scale from 4 (*almost always true*) to 1 (*almost never true*). Higher scores on the Child TARQ reveal individuals' perceptions of increasing rejection, whereas lower scores indicate more acceptance. At first, the original Child TARQ was translated and adapted into the Japanese language and culture. After that, we devised an 18-item shortened version (Aktar, Sugiura, Uddin, & Hiraishi, in press) that shortened version scores have been used for investigating the association among the major variables in this study. The items for the shortened Japanese version of TARQ were selected according to highest item information function (IIF) criteria of the item response theory approach (Aktar et al., in press). Total Information Function (TIF) curves confirmed that the shortened TARQ offers analogous information as the original length scale. The shortened Japanese version demonstrated adequate convergent validity in terms of significant correlations between the IRT scores of the sub-scales of the shortened and original version (Aktar et al., in press). Furthermore, the global shortened Japanese TARQ and its sub-scales individually reflected satisfactory concurrent validity with the Japanese version of world health organization (WHO) five wellbeing index (WHO-5-J) (Aktar et al., in press). Evidence (Aktar et

al., in press) also shows that the shortened version is highly reliable in global scale level as well as sub-scale level (Cronbach's alphas varies range from .93 to .81).

### Peer Acceptance Scale

This scale (Barboza, Schiamberg, Oehmke, Korzeniewski, Post, & Heraux, 2009) of 3-items was utilized to measure children's representation of the level of acceptance they experience from other peers at schools. The items were (a) other students are kind and helpful to me (b) I am accepted by other students (c) we enjoy being together. Possible response options range from 1 (*never*) to 5 (*always*). The total score was computed by summing all three items. Higher values indicate an increasing level of peer support and acceptance. We translated this scale into the Japanese language. An exploratory factor analysis (EFA) of the 3-items yielded a strong peer acceptance factor that accounted for 80% of the item variance with factor loadings ranged from .86 to .92. As there were only three items confirmatory factor analysis (CFA) could not be performed to measure a factor/construct (Marsh, Hau, Balla, & Grayson, 1998). Previous evidence (Barboza et al., 2009) showed that the peer acceptance scale has satisfactory reliability (Cronbach's alpha .73) and factor loadings (ranges from .72 to .81) In the present study, the Cronbach's alpha of peer acceptance scale was .92.

### The Sense of Authenticity Scale

The 7- item sense of authenticity scale (SOAS) was used in this study (Ito & Kodama, 2005) to assess the overall subjective sense of being true to oneself. Sample items on the SOAS include: "I am who I am at all the times." Items are scored on a 5-point scale of 1 (*disagree*) through 5 (*agree*). A total score is computed by summing the seven items. The SOAS has been used in several studies on Japanese junior high school students (e.g., Suzuki &

Ogawa, 2008; Yamada & Yoshizawa, 2017). These previous studies have shown that this scale is highly reliable (Cronbach's alphas ranges from .86 to .83) and valid (factor loadings of items range from .79 to .51). In this study, the Cronbach's alpha of SOAS was .90.

### Data Analyses

Descriptive statistics and intercorrelations of all variables were explored first. Before testing the hypothetical model, the measurement model of TARQ was tested by performing confirmatory factor analysis (CFA). We formed item-parcels of TARQ as an indicator of the latent construct for efficient estimates following Little, Cunningham, Shara, & Widaman (2002). Equivalence of measure (TARQ) between gender was tested through multigroup CFA by estimating configural, metric, and scalar invariance (Putnick & Bornstein, 2016).

To assess the impact of teacher acceptance-rejection on sense of authenticity—as mediated by peer acceptance—we fit a series of structural equation models (SEM). To test the mediation effect bootstrap method with 2,000 samples (Shrout & Bolger, 2002) was used.

All CFA and SEM analyses were performed by Mplus v.8 software (Muthén & Muthén, 1998-2017) employing the robust maximum likelihood estimation (MLR). As  $\chi^2$  values are inflated by sample size, therefore, the overall model fit was assessed by the CFI, SRMR, and RMSEA. The *acceptable fit* was considered when  $CFI \geq .90$ ,  $SRMR \leq .08$ , and  $RMSEA \leq .10$  (Hair, Black, Babin, & Anderson, 2014; Hu & Bentler, 1999; MacCallum, Browne, & Sugawara, 1996).

To assess the moderation effect of gender on relations among constructs, the invariance of the full model across gender was examined by multigroup SEM that compares the fit of the constrained model,

and the configural model. For model comparison in multigroup CFA and SEM greater emphasis was provided to the incremental fit indices than to the significance of the  $\chi^2$ . Following the guideline of Cheung & Rensvold (2002), change in CFI  $\leq .01$  between constrained and configural model was considered as measurement (metric & scalar) and structural path invariance.

## Results

### Descriptive Statistics and Correlations

Table 1 displays descriptive statistics (e.g., *M* & *SD*), and intercorrelations among variables. All relations between variables were in the expected direction (teacher acceptance-rejection would be negatively associated with peer acceptance and sense of authenticity).

It is evident from Table 1 that teacher acceptance-rejection was significantly negatively related to peer acceptance and sense of authenticity. That implies more perceived teacher acceptance associated with more peer acceptance and sense of authenticity. Perceived peer acceptance is positively significantly associated with adolescents' sense of authenticity. No significant gender differences emerged.

### Measurement Model of TARQ

First, a measurement model of TARQ was tested. The model did not fit the data,  $\chi^2(2) = 43.14$ ,  $p < .001$ , CFI = .96, RMSEA = .19, 90% CI = [.14, .24], SRMR = .03. A residual covariance between coldness and indifference was added to the model to achieve the model fit,  $\chi^2(1) = .38$ ,  $p = .54$ ,

CFI = 1, RMSEA = .00, 90% CI = [.00, .091], SRMR = .003. That indicates emotionally cold teachers may be seen as indifferent. All scales loaded significantly (standardized loadings spread through .56-.95) on the latent factor.

Measurement model of TARQ was further tested across genders. The findings of multigroup CFA supported the configural, metric, and scalar invariance of TARQ across boys and girls (see Table 2).

### Structural Models

The hypothesized model of direct association between teacher acceptance-rejection and adolescents' sense of authenticity showed fit to the data  $\chi^2(4) = 20.43$ ,  $p < .001$ , CFI = .98, RMSEA = .08, 90% CI = [.049, .10], SRMR = .04. Figure 1a depicts that adolescents' representation of teacher acceptance-rejection directly influence their sense of authenticity.

When the mediator variable (peer acceptance) was added in the model, the model showed fit to the data,  $\chi^2(7) = 25.43$ ,  $p < .001$ , CFI = .98, RMSEA = .07, 90% CI = [.040, .095], SRMR = .04. We found that teacher acceptance significantly predicted peer acceptance, which in turn predicted a sense of authenticity. The indirect effect of teacher acceptance on the sense of authenticity through peer acceptance was significant,  $\beta = -.08$ ,  $p < .001$ , 95% Bootstrap CI [-.115, -.05] and suggesting that peer acceptance partially mediated the linkage (see Figure 1b). The collective set of predictors explained 20% of the variability in the sense of authenticity in Japanese adolescents' students.

Table 1

*Descriptive Statistics, and Correlations among Variables*

	1	2	3
1. Teacher acceptance-rejection	----		
2. Peer acceptance	-.25**	----	
3. Sense of authenticity	-.31**	.40**	----
<i>M</i>	30.22	10.77	24.02
<i>SD</i>	7.79	2.70	5.33

Notes. \*\*  $p < .01$

**Moderation by Gender**

The mediation model in Figure 1b was further tested for moderation across gender. The fully constrained model revealed a good fit for the data,  $\chi^2(24) = 39.058, p < .05, CFI = .986, RMSEA = .05, 90\% CI = [.016-$

$.071], SRMR = .05$ . The structural paths were fully invariant across genders,  $\Delta\chi^2(10) = 7.05, p = .72, \Delta CFI = .004$ . Therefore, no moderation effect of gender was observed.

Table 2

*Measurement Invariance Tests of Child TARQ*

Model	$\chi^2$	<i>p</i>	<i>df</i>	CFI	RMSEA (90% CI)	SRMR	$\Delta\chi^2$	<i>p</i>	$\Delta df$	$\Delta CFI$
Configural	.40	.82	2	1	.00 (.00-.07)	.003	----		----	----
Metric (measurement weights)	3.76	.58	5	1	.00 (.00-.07)	.035	2.93	.40	3	.00
Scalar (intercepts)	8.28	.50	9	1	.00 (.00-.06)	.032	4.77	.51	4	.00

Note.  $\chi^2$  = Chi-square; *df* = degrees of freedom; CFI = comparative fit index; SRMR = standardized root mean square residual; RMSEA = root mean square error of approximation; CI = confidence interval;  $\Delta\chi^2$  = delta Chi-square;  $\Delta df$  = delta degrees of freedom;  $\Delta CFI$  = delta comparative fit index

**Discussion**

The research aimed to investigate the first time the concurrent association among teacher acceptance, peer acceptance, and a sense of authenticity in a mediation model. The findings of the direct effect of teacher acceptance on Japanese adolescents' sense of authenticity support previous IPARTheory based studies, which showed a significant relationship between teacher

acceptance-rejection and students' self-concept, self-esteem (Ali et al., 2015; Erkman et al., 2010). It could be said that like self-esteem, & self-concept, adolescents' sense of authenticity is significantly influenced by teacher acceptance-rejection. Therefore, hypothesis 1 is supported. As expected, the results of the hypothetical mediation model indicated that teacher acceptance-rejection also indirectly contributes to the development of



a sense of authenticity through peer acceptance. This finding of

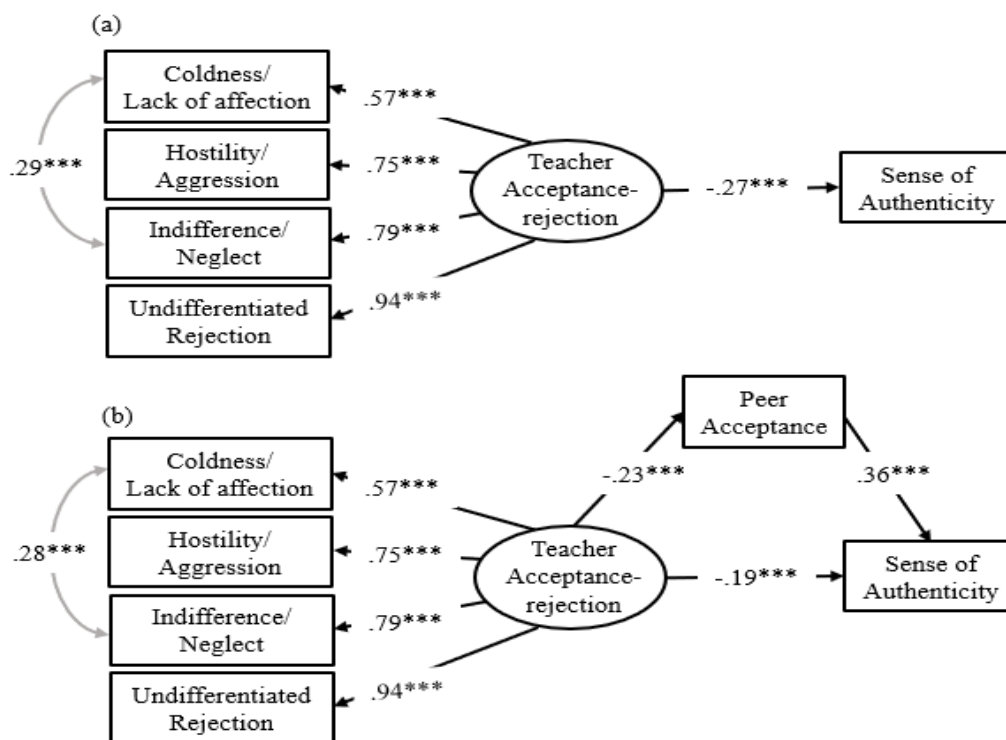


Figure 1. Direct effect (a) of teacher acceptance-rejection on adolescents' sense of authenticity, and indirect effect (b) through peer acceptance. Standardized estimates are shown. \*\*\* $p < .001$ .

the teacher-student relationship also influences peer relationship is consistent with the findings of Hughes and Im (2016). The result of the mediational role of peer acceptance in the relationship between teacher acceptance and sense of authenticity is also similar to the conclusions drawn by Walsh et al. (2010), except that they examined mental well-being (not the sense of authenticity) as an outcome. Therefore, hypothesis 2 is supported. In a study on Japanese adolescents, Ishihara (2013) found that perceived acceptance from teachers and peers was significantly associated with junior high school students' sense of authenticity. In a very recent study, Yamada and Yoshizawa (2017) showed that students' relations with teachers (not peer) uniquely predicted their sense of authenticity. The present study is the first known study showing that peer acceptance

partially mediates the relationship between teacher acceptance and adolescents' sense of authenticity. This study also indicates that the mechanism of the direct and indirect effect of teacher acceptance-rejection (through peer acceptance) on adolescents' sense of authenticity is robust across gender. Consistent with IPARTheory's universalist perspective (Ali et al., 2015), teacher acceptance-rejection was related to a sense of authenticity for both boys and girls.

We should note that the findings of this study have theoretical and practical outcomes. By first-time showing the significant association between IPARTheory based teacher acceptance-rejection and Japanese adolescents' sense of authenticity this study contributes to extend IPARTheory in cross-cultural area. As mentioned before, a matter of attention for Japan is that adolescents' self-esteem is

decreasing (Ogihara, 2016). So, this evidence will contribute to developing strategies for professionals working in Japanese middle schools to increase adolescents' optimal self-esteem (sense of authenticity is the foundation of optimal self-esteem) through peer acceptance that is invisibly guided by teacher acceptance or rejection behaviors. Teachers in school, through their instruction, behavior, and affect, establish the context in which peers in the school relate to each other. In the Japanese school system, the idea of 'good child behavior' is very intense and culturally desirable. Students are required to follow the system that is established in their classes, which may lead young students to deviate from their true selves. Thus, teachers need to be encouraged to develop more warmth and supportive one-on-one relations with all children through professional development programs. They need to be more obligated to meet students' needs for a positive response, which would ultimately allow students not to follow their defensive behaviors. Furthermore, it would enable students to be more open and authentic to others and toward self and, in turn, would facilitate the development of fully functioning persons.

However, our findings showed that the total variance of peer and teacher acceptance on the adolescents' sense of authenticity was 20%. Previous literature reported weak to moderate associations between Japanese students' self-acceptance, self-realization and school-related factors (Hosoda & Tajima, 2009; Okada et al., 2009). Future studies, including variables related to familial factors, such as parental acceptance, can help to understand the variability in adolescents' sense of authenticity. Another shortcoming is that all data were self-reported at a single point in time. However, it is possible that students with a higher sense of authenticity may perceive their teachers and peers more positively than do students with a lower sense of authenticity. Strong inferences

about directionality require longitudinal studies. The self-reported nature of the questionnaires may have affected the findings due to shared source and method variance. In future studies, different reporters and methods could be used to minimize the source/method bias.

Despite the above limitations, this study confirms the conclusion that teacher acceptance-rejection directly related to adolescents' sense of authenticity and peer acceptance mediate this relationship, which is critical for adolescents' subjective well-being and optimal functioning.

### **Compliance with Ethical Standards**

**Conflict of Interest:** On behalf of all authors, the corresponding author states that there is no conflict of interest.

**Ethical Approval:** All procedures performed in studies involving human participants were in accordance with the ethical standards of the university research review committee of the affiliation of the authors and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

**Informed Consent:** Informed consent was obtained from all individual participants included in the study and also from their parents.

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