We Are (Migrant) Families:

The Interdependence between Family Members' Actual and Perceived Acculturation

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Abstract

Acculturation has been studied extensively in the context of migrant families. Acculturation gaps between parents and youth have been associated with negative outcomes for migrant families and youth. Importantly, past studies have used different methods to operationalize this gap. Some studies compare self-reported acculturation from both family members in a parent-child dyad, the actual measure. In contrast, other studies rely on a single participant to report acculturation levels of both their relative and themselves, the perceived measure. The current study directly examined the interplay between actual and perceived measures of the acculturation gap by surveying migrant parents and their children in the community (parents: N = 153, M_{age} = 49.03, 60% female, 71.2% 1st generation migrants; youth: N = 153, M_{age} = 19.64, 58% female, 58.8% 2nd generation migrants). All families were residing in the United Kingdom, but varied in their heritage culture. Parents and youth were asked to report acculturation towards their heritage and settlement cultures, of themselves *and* of their relative (youth and parents respectively). Using the Accuracy and Bias in the Perception of the Partner model (in SEM), participant's perceived acculturation was found to be associated with the acculturation of themselves, but also with their partners' acculturation level. The co-existence of accuracy and bias in parents' and youth's perception of their partners' acculturation indicates that perceived acculturation might not be an accurate proxy measure of the actual acculturation. Future research may wish to take differences between the perceived and actual measure of acculturation into consideration.

Keywords: Acculturation, Perceived Acculturation, Acculturation Gap

Introduction

Acculturation refers to the process of change in an individual's beliefs, values, and behaviors as a consequence of prolonged contact with a new culture (Berry, 2006; Ward & Geeraert, 2016), and thus migrants need to negotiate both the settlement and heritage culture (Ryder, Alden, & Paulhus, 2000). The process of acculturation often takes place within the family context. However, not all family members experience the same acculturation process, with differences occurring in the orientation towards each culture and the speed of the acculturation process (Costigan & Dokis, 2006; Tardif-Williams & Fisher, 2009). Indeed, research examining the acculturation gap between parents and youth show that parents are often more orientated towards the heritage culture than youth, with youth being more orientated towards the settlement culture (Birman, 2006; Telzer, 2010). According to the gap-distress model, such acculturation gaps would be negatively associated with individual and family level outcomes (Szapocznik & Kurtines, 1993; Portes & Rumbaut, 2001).

Researchers have employed two main methods to compute the acculturation gap in families: an actual or perceived gap. An *actual acculturation gap* is assessed by directly comparing both parents' and youth's self-report acculturation (Nieri et al., 2016; Telzer, Yuen, Gonzales, & Fuligni, 2016). In contrast, the *perceived acculturation gap* relies on testing either the parent or youth, but not both. Specifically, the self-reported acculturation of one individual is compared with *their perception* of their partner's acculturation (Lazarevic, Wiley, & Pleck, 2012; Rasmi, Chuang, & Hennig, 2015). A third, less commonly used method is asking participants to directly estimate the gap between themselves and their relatives, but this is not an approach we considered in this paper.

The advantage of the perceived acculturation gap is that only a single participant in a

dyad needs testing. Although more efficient, the accuracy of the perceived acculturation gap as a proxy measure for the actual gap is less clear. For instance, research examining the gap-distress model has been somewhat inconsistent (Telzer, 2010). This inconsistency could be due to a number of factors, including varied sample characteristics (different migrant populations) or how acculturation has been operationalized (Berry, 2006). However, a further important factor seems to be whether the gap was measured as a perceived or actual construct (Sun, Geeraert, & Simpson, 2020).

Several studies relied on children's ratings of self and parent to measure the gap. This perceived acculturation gap was found to be associated with youth and family outcomes both cross-sectionally (Lazarevic et al., 2012; Unger, Ritt-Olson, Soto, & Baezconde-Garbanati, 2009) and longitudinally (Unger, Ritt-Olson, Wagner, Soto, & Baezconde-Garbanati, 2009). In contrast, other studies relied on children and parent's self-ratings to operationalize the gap. Studies employing this actual gap often fail to find an association with youth and family outcomes, either cross-sectionally (Telzer et al., 2016) or longitudinally (Nieri et al., 2016). However, in a longitudinal study of Hispanics in the USA (Schwartz et al., 2016) actual acculturation discrepancies were shown to predict poorer family functioning which in turn resulted into negative youth outcomes. Taken together, the gap-distress model seems strongly supported by studies relying on perceptual gaps, but only partially supported by studies employing actual gaps.

Only few studies have directly contrasted the perceived and actual acculturation gap. A notable exception is Merali (2002), who found that parents and children made largely inaccurate judgement about the other's acculturation. Out of fifty families, only one parent and four adolescents accurately estimated the acculturation level of their child and parents respectively. Telzer (2010) argued that such misjudgments might indicate that the perceived

gap is not an accurate reflection of an actual acculturation gap. In turn, this raises issues around the presumed causality between the *perceived* acculturation gap and family conflict. More specifically, in families that experience greater intergenerational conflict, children and parents may tend to overestimate discrepancies on other domains such as acculturation. (Choi, He, & Barachi, 2008). Importantly, studies relying on an actual acculturation gap would not be plagued by such issues. Indeed, longitudinal analyses have shown that actual parent-adolescent acculturations gaps are directly predictive of perceived family functioning (Schwartz et al., 2016). Still, to date no study has directly examined how the actual and perceived gap relate to one another.

Accuracy and bias in the perception of a partner have been examined in the context of close relationships (Kenny & Acitelli, 2001). Individuals in a dyad report both their feeling towards their partner and their perceptions of their partner's feelings towards themselves. The extent to which self-reported feelings of a person are associated with their partner's perception of those feelings gives an indication of the *accuracy* of the perception (*accuracy effect*). In contrast, the extent to which a person's self-reported feelings are associated with their perception of their partner's feelings signals the extent of *bias* of the perception (*bias effect*). Examining these effects in heterosexual couples, Kenny and Acitelli (2001) found evidence of both accuracy and bias in partners' perceptions of each other. One specific source of bias is that partners often overestimate the extent to which they view things similarly.

The present study aims to examine the effects of accuracy and bias in a novel context; acculturation perception in parent-child dyads. Both accuracy and bias effects are expected to occur across parents and children. Accuracy effects will be evident from an association between youth's acculturation, that is self-reported and perceived (by the

parent), and also between parent's acculturation, that is self-reported and perceived (by the child). In contrast, bias effects will manifest as an association between youth's self-reported acculturation and youth's perception of parent's acculturation, and also between parent's self-reported acculturation and parent's perception of youth's acculturation.

Current Study

The present study aims to examine the accuracy and bias in perception of migrant youth and parents' acculturation based on the Accuracy and Bias in Perception of the Partner Model, using data from Sun, Geeraert and Simpson (2020). In the study, migrant youth and one of their parents were surveyed as a family dyad. All families were residing in the United Kingdom, but varied in their heritage culture. The use of a heterogeneous sample is not uncommon in this field (e.g., Telzer, 2010). Participants were asked to assess their acculturation towards both their heritage and settlement culture of themselves *and* their relative. The structural equation model (see Figure 1) tests whether parents' and youth's self-reported acculturation predict perceived acculturation of themselves (accuracy effects) and of their partners (bias effects), separately for two cultures. We hypothesize that for the heritage culture, perceived youth's and parents' acculturation by their partners will be associated with youth's and parents' self-report acculturation (*accuracy effect*, *Hypothesis 1*), and associated with their partner's self-report acculturation as well (*bias effect, Hypothesis 2*). Turning to the settlement culture, perceived youth's and parents' acculturation by others is hypothesized to be associated with youth's and parents' self-report acculturation (*accuracy effect, Hypothesis 3*), as well as associated with their partner's self-report acculturation (*bias effect, Hypothesis 4*).

--- Insert Figure 1 about here ---

Methods

Participants' Characteristics

Data were analyzed from a dyadic acculturation project (see Sun et al., 2020), consisting of families with a migrant background living in the UK. The sample consisted of 306 participants nested within 153 parent–offspring dyads. All families were residing in the United Kingdom (the settlement culture), but varied in their heritage culture. Spanning a total of 53 countries, the most common countries of origin were South Asian (18.3%), Caribbean (15.0%), West African (14.4%), East Asian (9.8%) or Southern European (7.8%).

The parent sample (60% females, 40% males; age range = 34-69, M_{age} = 49.03, *SD* = 6.40) was mostly 1st generation immigrants (71.2%; age of migration *M* = 23.61, *SD* = 8.51; length in UK *M* = 26.40, *SD* = 9.44), with smaller groups reporting to be 2nd (22.9%), or 3rd and 4th generation (5.9%). In the adolescent and emerging adult sample (58% females, 42% males; age range = 13-25, M_{age} = 19.64, *SD* =2.28) few individuals were born outside the UK (13.7% 1st generation; age of migration *M* = 8.33, SD = 4.93; length in UK = 11.58, SD = 4.52), with the majority being 2nd generation immigrants (58.8%) or 3rd and 4th generation (27.5%). There were 3 participants who did not report their age and one adolescent who did not report their gender.

Procedure

Surveys were distributed by snowball sampling through several community groups in the greater London area. Parents and youth were provided with the information sheets and questionnaires and were surveyed independently. Qualtrics was used to present the survey to allow questions to be personalized with regards to the heritage culture. However, paper booklets were also available upon request. A statement of consent was shown at the beginning of the survey. Where questions were asked about the other family member, a targeted approach was adopted. Participants responded to questions relative to the

targeted ones.

Measures

Demographic variables. Participants were asked to report their country of birth, gender, age, age of moving to the UK, and the length of time in the UK. Additionally, parents reported the generation status of themselves and the youth.

Acculturation-self. Parents' and youth's acculturation level was measured using the Vancouver Index of Acculturation (Ryder et al., 2000). This measure assesses participants' acculturation orientation from a range of topics, including cultural practices, traditions, values, and social interactions. For each culture, participants were asked to indicate their agreement with 10 acculturation statements using a scale from 1 (= strongly disagree) to 7 (= strongly agree). For instance, acculturation toward the heritage culture was measured using items like 'I often participate in traditions of *my heritage culture*' and for acculturation toward the settlement culture, the item would be 'I often participate in *British cultural traditions*'. Both scales had good reliability (both αs > .80).

Acculturation-other. The acculturation measure was adapted to measure parents' and youth's perception of acculturation for their partner (youth and parents respectively). In addition to the self-report measure, parents reported their perception of youth's acculturation toward both cultures, using items like 'My son/daughter often participates in traditions of *the heritage culture*'. Similarly, youth reported their perception of their parents' acculturation, using items like 'My parent often participates in traditions of *British cultural traditions*'. Both scales had good reliability (both αs > .80).

Other measures. The survey also included the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) and the Overlap of Self, Ingroup and Outgroup Scale (Schubert & Otten, 2002). Although not relevant for the current study, these measures have

previously been analyzed in the context of the gap-distress model (Sun et al., 2020).

Results

Descriptive statistics and bivariate correlations for self-report acculturation and perceived acculturation by others variables are presented in Table 1. To examine the relationship between self-report and perceived acculturation, the data were analyzed using SEM with Mplus 7.4 (Muthén & Muthén, 2015). For each culture (heritage and settlement), a latent Accuracy-Bias Model was computed (Kenny & Acitelli, 2001). Two independent variables - youth's and parents' self-report acculturation, as well as two dependent variables - perceived youth's and parents' acculturation by parents and youth, were modelled as latent variables, based on three item parcels for each. The item parcels for all latent variables were constructed using the item-to-construct balance approach (Little, Cunningham, Shahar, & Widaman, 2002). For each construct, items were distributed equally among parcels according to their high or low factor loadings to exploit the between-parcel covariance.

Heritage Culture

For the heritage culture, the latent variable model[1] showed a good model fit, χ^2 (48, N= 153) = 78.35, p = .0037, χ^2/df = 1.63; RMSEA = .06, 95% CI [.04, .09]; SRMR = .03; CFI = .98; TLI = .97. In terms of individual paths (Figure 2), both accuracy and bias effects were examined. Youth's self-report heritage acculturation was positively associated with their acculturation perceived by parents (β = .43, SE = .08, p < .001), indicating that youth, who

[1] Latent variables (with standardized factor loadings) were self-perceived youth acculturation (2.10; 2.15; 2.13); self-perceived parents' acculturation (2.08; 2.17; 2.23); youth acculturation perceived by parents (2.25; 2.23; 2.21); and parents' acculturation perceived by youth (2.35; 2.36; 2.37). R^2 for latent outcomes - youth acculturation perceived by parents and parents' acculturation perceived by youth were .68 and .55 respectively.

reported greater heritage acculturation, were perceived to have a higher heritage orientation by their parents as well. At the same time, parents' heritage acculturation was positively associated with their acculturation level perceived by their offspring (β = .37, *SE* = .09, $p < .001$), suggesting that parents, with greater orientation toward their heritage culture, were in line with the perception of their offspring. Taken together, the results indicate the existence of *Accuracy effects* between self-report and perceived heritage acculturation (*Hypothesis 1*). To examine whether these two accuracy effects were different, the accuracy parameters were subsequently constrained to be equal. The constrained model was not significantly better than the unconstrained model, $\chi^2(1) = 1.92$, $p > .10$, suggesting that there was no significant difference between two accuracy effects.

In addition, youth's acculturation perceived by the parents was positively associated with their parents' level of heritage acculturation (β = .48, *SE* = .08, $p < .001$), indicating that youth's heritage orientation perceived by parents was also predicted by their parents' acculturation level. Similarly, parents' acculturation perceived by the offspring was positively associated with youth's level of heritage acculturation (β = .45, *SE* = .09, $p < .001$), suggesting that parents' heritage acculturation perceived by their offspring was related to both their own level of acculturation and their offspring's. All in all, these results confirmed the hypothesis (*Hypothesis 2*), showing the expected *Bias effects*. In addition, a comparison of the partner effects, indicated there was no significant difference between two bias effects, $\chi^2(1) = 3.387$, $p > .05$.

--- Insert Figure 2 about here ---

Settlement Culture

Next, the same analyses were conducted for the settlement culture. The latent variable model[2] showed an acceptable model fit, χ^2 (48, N= 153) = 132.32, $p < .001$, χ^2/df = 2.76; RMSEA = .11, 95% CI [.09, .13]; SRMR = .06; CFI = .93; TLI = .90. Again, regression coefficients were plotted as individual paths (Figure 3). First, examining accuracy effects, youth's self-reported settlement acculturation was positively associated with youth's acculturation perceived by parents (β = .50, *SE* = .07, $p < .001$), indicating that youth, who reported greater identification to their settlement culture, were perceived to have a higher orientation by their parents as well. Similarly, parents' settlement acculturation was positively associated with their acculturation perceived by their offspring (β = .40, *SE* = .07, $p < .001$), suggesting that parents and youth agreed on parents' settlement acculturation. In summary, those results suggested the emergence of accuracy effects (*Hypothesis 3*). A further analysis showed that the two accuracy effects were not significantly different from one another, $\chi^2(1) = 1.15$, $p > .10$.

With regard to the *Bias effects*, youth's acculturation perceived by their parents was positively associated with parents' level of settlement acculturation (β = .38, *SE* = .08, $p < .001$), indicating that perceived youth's settlement orientation was not only predicted by their own acculturation level, but also their parents'. Parents' acculturation perceived by youth was positively associated with youth's settlement acculturation (β = .53, *SE* = .07, $p < .001$), suggesting that perceived parents' settlement acculturation was related to parents' own level of acculturation, and also related to their offspring's level. Taken together, results

[2] Latent variables (with standardized factor loadings) were self-perceived youth acculturation (2.01; 2.09; 2.01); self-perceived parents' acculturation (2.26; 2.17; 2.23); youth acculturation perceived by parents (1.93; 1.99; 2.01); and parents' acculturation perceived by youth (2.19; 2.21; 2.08). R^2 for latent outcomes - youth acculturation perceived by parents and parents' acculturation perceived by youth were .52 and .58 respectively.

indeed confirmed the prediction (*Hypothesis 4*). To examine whether these bias effects were different, a constrained model was again conducted. Interestingly, the constraint did significantly worsen the model fit, χ^2 (1) = 19.97, $p < .01$, indicating that the effect from youth acculturation on the parents' acculturation (perceived by youth) was larger than the effect from the parents' acculturation on the youth's acculturation (perceived by parents).

--- Insert Figure 3 about here ---

Discussion

The acculturation gap between parents and youth has been studied extensively, using one of two methods to measure the acculturation gap: actual or perceived. The conflicting results of using these measures have put into question the accuracy of migrant youth and parents in perception of their partner's acculturation. Using the Accuracy and Bias model, the present study examined how parents and youth perceived acculturation is predicted by the target's self-reported acculturation (accuracy effect) and the perceiver's self-reported acculturation (bias effect). As predicted, accuracy and bias effects emerged for both the heritage and settlement cultures, such that youth's and parents' perceived acculturation was positively predicted by acculturation levels of target and perceiver.

Is perceived acculturation an accurate measure of the actual level?

The positive association between parents and youth perceived acculturation and targets' self-reported acculturation (accuracy effect) indicates that perceived acculturation was in line with the target's actual level. This result suggests that the perceived measure does reflect, to some extent, the true self-report measure. At the same time however, the bias effect implies that the perceived measure was also associated with the perceiver's level – their partners' acculturation, suggesting an assumed similarity effect. Thus, migrant parents and youth assumed their partners (youth and parents respectively) navigate these

two cultures as they do themselves. Taken together, the results suggest that perceived acculturation does not completely, nor solely, represent the target's actual level. Due to the cross-sectional nature of the data, it is not possible to draw firm causal conclusions. Nonetheless, the bias effects do provide evidence that there is considerable bias in the perception of the partners' acculturation.

These results are in line with the arguments of Birman (2006) and Telzer (2010), that perceived acculturation might not be an accurate measure of the other's actual level. There might be a number of explanations for those results. For instance, the communication in adolescence and emerging adulthood is considered as a significant challenge for parent-adolescent relationship. The increasing autonomy during this developmental period changes the way youth define privacy, and share their experiences by monitoring self-disclosure with their parents (Laursen & Collins, 2004). Inadequate or insufficient conversations between parents and youth may therefore result into incongruent perceptions and expectations (Steinberg, 2001). Future research may wish to include parent-youth communication quality as a moderator. An alternative account for the bias effects in the perception of acculturation would be linked with unclear causality in intergenerational conflicts (Telzer, 2010). The presence of frequent conflicts between parents and youth may cause these individuals to exacerbate acculturation differences between them, through either a motivational or cognitive mechanism. This may cause perceivers to over- or underestimate the other member's acculturation based on their own levels. In contrast, families that are more harmonious might overestimate the extent to which acculturation levels are aligned. Thus, future research may wish to examine the causality between the family conflicts and perceived acculturation differences.

Another way to examine the validity of the perceived acculturation measure is to examine the association between the perceived measure and an outcome variable (i.e., youth and family adjustment). The acculturation research has indicated that acculturation is associated with some of adolescents' developmental outcomes. Future research may wish to examine such relationship. The use of a sample consisting of migrants with diverse ethnic backgrounds (e.g., South Asian, Caribbean, West African, East Asian and Southern European) warrants that findings are not limited to a single ethnic group. Yet, it would nonetheless be difficult to generalize these findings to population that were not examined in the study.

Implication

Findings of the present study imply that there was accuracy as well as bias in parents' and youth's perception of their partner's acculturation (youth and parents respectively). This suggests that self-reported acculturation cannot be substituted by a perceived measure. Instead, it emphasizes the importance to treat those two measures differently both conceptually and statistically. Differentiating two types of acculturation gaps may allow researcher to pinpoint which type of parent-youth gaps (actual vs. perceived) that was problematic. The distinction may seem subtle, yet the implication would be nontrivial for researchers or practitioners. For instance, if an actual acculturation gap between parents and youth is linked with negative youth outcomes, then an intervention may want to focus on reducing the differences between parents and their children. Alternatively, if a perceived, but not an actual, acculturation gap is linked with negative youth outcomes, then other factors at play may need to be considered, such as family conflicts or parenting style.

Conclusion

The present study examined the accuracy and bias in migrant parents' and youth's perception of their partners' acculturation using the accuracy and bias model. Parents and

youth perceived acculturation were not only predicted by the acculturation of the target but also the perceiver's acculturation levels. Taken together, perceived acculturation was in line with targets' self-reported acculturation, but the occurrence of bias effects suggests it is not a completely accurate measure. Future research should take differences between the perceived and actual measure into consideration.

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		M(SD)		1	2	3	4
		Heritage	Settlement				
1	youth's self-report acculturation	5.57(.92)	5.17(.94)	-	.60**	.64**	.66**
2	Parents' self-report acculturation	6.17(.84)	4.47(1.19)	.34**	-	.60**	.71**
3	Parents' acculturation perceived by youth	6.30(.80)	4.36(1.13)	.62**	.55**	-	.45**
4	Youth's acculturation perceived by parents	5.50(1.05)	5.35(.84)	.57**	.50**	.34**	-

Table 1. Bivariate Correlation between acculturation (as a function of target, culture, and perceiver). Values above the diagonal are for the heritage culture; Values below the diagonal are for settlement culture. *p<.05 **p<.001

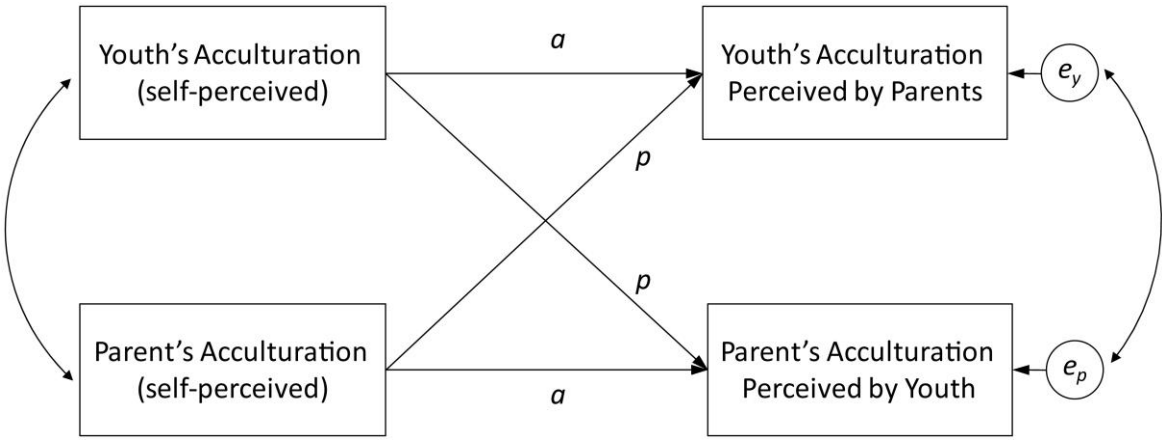

Fig. 1 Theoretical model based on the Accuracy and Bias in the Perception of the Partner Paradigm where the accuracy effect is symbolized by *a*, and the bias effect is symbolized by *p*. Additionally, e_y and e_p represent the residual variance for youth's and parents' outcome respectively. The curved double-arrow lines represent the correlations between two predictors and residual variance of two outcomes.

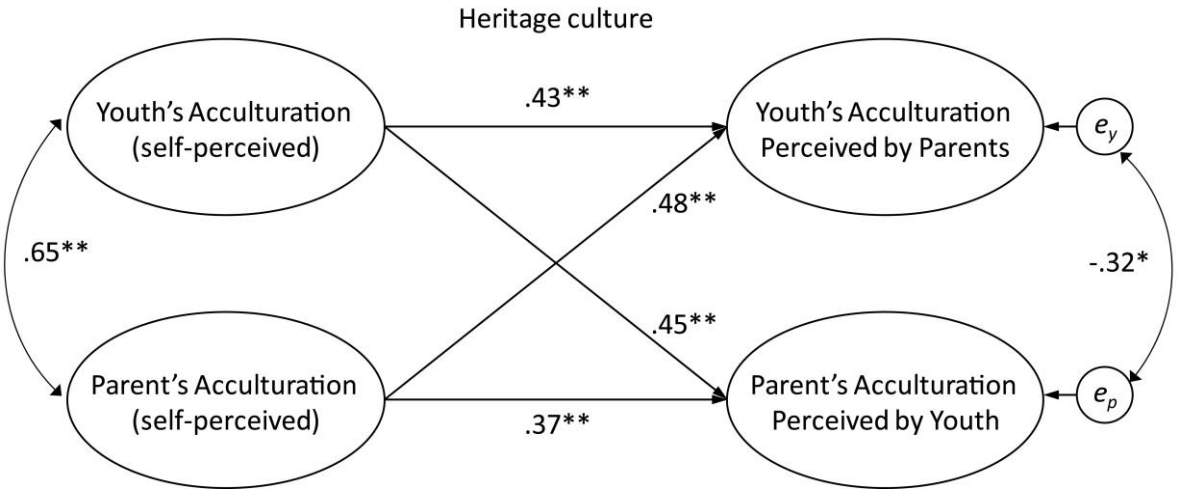

Fig. 2 The figure displays the Accuracy and Bias Model of the heritage culture. Acculturation was operationalized as a latent variable. Standardized coefficients are shown. *p<.05 **p<.001

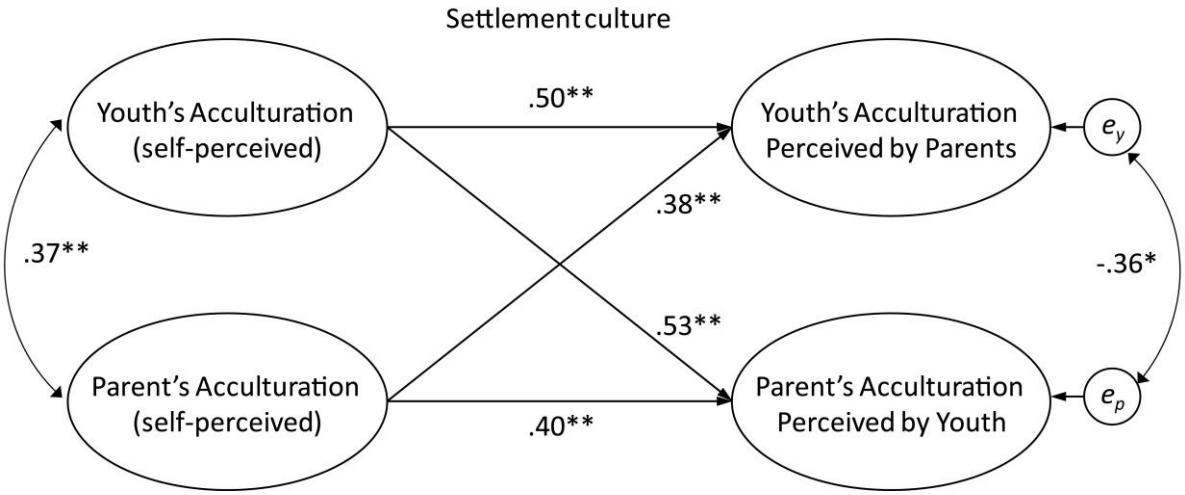

Fig. 3 The figure displays the Accuracy and Bias Model of the settlement culture. Acculturation was operationalized as a latent variable. Standardized coefficients are shown. *p<.05 **p<.001