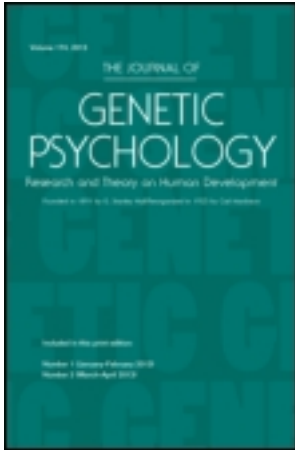


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## The Journal of Genetic Psychology: Research and Theory on Human Development

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/vgnt20>

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Yih-Lan Liu <sup>a</sup>

<sup>a</sup> National Chiao Tung University, Taiwan

Published online: 27 Aug 2013.

To cite this article: Yih-Lan Liu (2013) Autonomy, Filial Piety, and Parental Authority: A Two-Year Longitudinal Investigation, The Journal of Genetic Psychology: Research and Theory on Human Development, 174:5, 557-581, DOI: [10.1080/00221325.2012.706660](https://doi.org/10.1080/00221325.2012.706660)

To link to this article: <http://dx.doi.org/10.1080/00221325.2012.706660>

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# Autonomy, Filial Piety, and Parental Authority: A Two-Year Longitudinal Investigation

YIH-LAN LIU

*National Chiao Tung University, Taiwan*

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**ABSTRACT.** A 2-year longitudinal study was conducted to test 3 causal models about adolescent autonomy, filial piety, beliefs about parental authority, and obedience in terms of personal, prudential, and multifaceted issues. Four hundred and thirty-six students from 10 junior and senior high schools in Taiwan (boys,  $n = 223$ ; senior high school,  $n = 211$ ) participated in the study. Hypothesis 1 predicted that autonomy (individuating autonomy vs. relating autonomy) would positively correlate with beliefs about authority legitimacy and obligation to obey, but was not supported. Hypothesis 2 predicted that filial piety (authoritarian piety vs. reciprocal piety) would positively associate with authority beliefs, and was partially supported. Authoritarian piety showed the positive relation with authority beliefs. Hypothesis 3 predicted that beliefs about authority legitimacy and obligation to obey would positively associate with obedience, and was supported. Hypothesis 4 predicted that age might moderate the structure models across domains, but the results indicated that age did not moderate the structural model in the prudential and multifaceted domains. The overall findings of this study reveal that adolescent beliefs about authority serve as a mediator between authoritarian piety and obedience, suggesting that traditional piety still has an influence on parent–child interaction in today’s society.

**Keywords:** authoritative beliefs, dual model of autonomy, dual model of filial piety, obedience

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Social domain theory describes the differentiation of social knowledge about parents and adolescents’ judgments of the legitimacy of parental authority. Research in this area indicates that both parents and adolescents are relatively likely to grant legitimate authority to parents over moral and conventional issues (Smetana, 1988), but adolescents are more likely to deny legitimate parental authority and claims to personal jurisdiction over personal, prudential, and multifaceted issues

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*Address correspondence to Yih-Lan Liu, Institute of Education, National Chiao Tung University, 1001 University Road, HsinChu, 300 Taiwan; ylliu@nctu.edu.tw (e-mail).*

(Darling, Cumsille, & Martínez, 2008). The discrepancies in parents and adolescents' judgments over the latter three types of issues suggest a transformation in the boundaries of parental authority and an eventual increase in adolescents' autonomy (Smetana & Asquith, 1994).

Cultures differ in their expectations for parent-child interactions and in the expression of adolescent autonomy. Cross-cultural studies of parental authority have revealed that in comparison with individualistic cultures, parents and adolescents in collectivist cultures are more likely to believe that parents have more authority to set rules across issues, and adolescents feel more obligated to obey in cases of disagreement (Darling, Cumsille, & Peña-Alampay, 2005). These studies have also indicated that adolescents from collectivist cultures expect autonomy at later ages (Fulgini, 1998).

Taiwan is considered a collectivistic society whose cultural beliefs include interdependence, affiliation, cooperation, and harmony in interpersonal relationships and responsiveness to group expectations. Filial piety (*xiao*) guides how children love, respect, and express loyalty to their parents, even to the point of suppressing their own wishes when necessary. Chinese adolescents are socialized to serve societal rather than individual goals and to conform to parents' expectations (Ho, 1994). This socialization process appears to deter the development of autonomy in Chinese adolescents. However, recent studies have indicated that while Chinese parents appear controlling, they also encourage independence (Bush, Peterson, Cobas, & Supple, 2002; Lin & Fu, 1990).

Previous studies have cautioned against simplifying the socialization of particular cultures into either collectivistic or individualistic patterns (Peterson, Bush, & Supple, 1999). In fact, research has indicated that individualism and collectivism reflect both basic needs for dependence and independence (Imamoglu, 1998, 2003; Kagitcibasi, 2007). Individualism and collectivism can coexist in individuals or groups simultaneously depending on different situations, on being with different social groups or on different interactional goals (Kagitcibasi, 2007). Therefore, the present study adopts the duality in socialization approach, which is defined as the coexistence of individualism and collectivism and of modern and traditional orientations in Taiwan based on globalization. Dual models of autonomy and filial piety are proposed. These models consist of individuating autonomy (IA) versus relating autonomy (RA) in the autonomy model and authoritarian versus reciprocal filial piety in the filial model. This dual approach to socialization processes better portrays the parent-adolescent interaction in present Taiwanese society.

I applied structural equation modeling by conducting a two-year longitudinal design to clarify the causal relationships between adolescents' autonomy, filial piety, and their beliefs about parental authority and obedience in the personal, multifaceted, and prudential domains. I also investigated age-related differences in the structure of the obedience models in these social domains.

### *Parental Authority and Adolescent Autonomy*

Adolescents' growing desires for autonomy and independence usually have important implications for their beliefs about parental authority. As adolescents have more autonomous experiences, such as making independent decisions as opposed to adhering to parent-directed decisions, or spending time with more antisocial friends, their belief in the legitimacy of authority decreases, which further increases their autonomous behavior (Kuhn & Laird, 2011). Social cognitive domain theory considers adolescents' level of conformity to their parents' rules as an index of adolescent behavioral autonomy (Smetana & Asquith, 1994). Indicators of psychological autonomy include adolescents' beliefs about whether their parents have the right to regulate their behaviors and whether they must comply with their parents' demands despite disagreements (Darling et al., 2005). Adolescents who comply with their parents' authority and who view parental authority as legitimate and obligatory may be viewed as lacking autonomy. In contrast, findings from a study of adolescent autonomy and family relationships reported that adolescents' perceptions of the legitimacy of parental authority positively predicted their behavioral autonomy (Peterson et al., 1999). Adolescents' conformity to their parental demands encompasses the extent to which they accept their parents' attitudes, values, and expectations. Experience making independent decisions that are opposite to parent-directed decisions during early adolescence may be regarded as premature, and is associated with behavioral problems (Dishion, Poulin, & Medici Skaggs, 2000). A certain degree of conformity to parents is necessary within a family so that parents can effectively guide adolescents' socialization, and adolescents' conformity to parents and acceptance of the legitimacy of parental authority are components of the connectedness of the relationship. These behaviors provide a secure base and a stabilizing form of control that facilitate the development of healthy autonomy (Peterson et al., 1999). Peterson et al. suggested that "continued conformity to parents' expectations is a complementary quality in reference to youthful autonomy" (pp. 434–435).

The relationship between autonomy and parental authority is less clear, possibly due to diverse definitions of autonomy. Previous studies have defined autonomy as a kind of behavioral freedom (e.g., allowing adolescents to make decisions about their behavior; Fuligni, 1998; Kuhn & Laird, 2011; Peterson et al., 1999) or beliefs about the legitimacy of parental authority and obligation (Darling et al., 2005). Baumrind (2005) suggested that autonomy should not be construed as the binary opposite of heteronomy but should be defined in a broader sense to include, for example, a sense of self-efficacy, agency and individuation that allows individuals to self-determine.

This study proposes a dual model of autonomy in accordance with features of Chinese social orientation that emphasize family harmony and solidarity (Yeh & Yang, 2006). This model is based on the self-determination theory that presents the self as a behavior-determining agent. The dual model of autonomy asserts

that an autonomous individual is able to develop personal values and goals, make decisions related to self-identity (cognitive), develop strategies to promote self-identity (functional), and commit to a self-identity by feeling confident about personal goals (emotional). This model also incorporates cross-cultural theories of the independent vs. interdependent self to define two forms of autonomy: IA and RA. IA represents an orientation toward acting volitionally against social constraints, and offers a route for individuals to achieve their self-identity by expressing individualistic attributes and distinctions. RA represents an orientation toward acting volitionally and emphasizes harmony in the relationship between the self and others, the quality of interpersonal relationships, and self-transcendence in relationships.

Relevant studies reported that IA and RA have no relationship with public conformity. IA has a slight positive relationship with parent–child conflict, defined as parental strictness or over-focusing on parents' needs. In contrast, RA has a negative relationship with the conflict variable (Yeh, Liu, Huang, & Yang, 2007; Yeh & Yang, 2006). These findings suggest that adolescents who possess greater IA and who emphasize distinctiveness from others by attending to, affirming, and expressing individualistic attributes are more likely to express disagreement when they regard their parents' constraints as unreasonable. However, these adolescents do not experience difficulty in publicly conforming to their parents' wishes (Yeh & Yang, 2006). In contrast to adolescents who have high IA, those who possess high RA and who value interpersonal harmony and interdependence are more likely to display sensitivity to and respect for others and to take parents' ideas into account. Adolescents with high RA are also more likely to avoid conflict with their parents.

Hence, I believe that adolescents with high IA should be less likely to recognize the legitimacy of parental authority and feel less obligated to obey rules because they believe that they have sufficient competence to make the right decision themselves. In contrast, adolescents with high RA should be more likely to recognize the legitimacy of parental authority and feel more obligated to obey rules, but their compliance with their parents' demands should be due to their authentic affection for their parents rather than due to parental authority. Moreover, as adolescents move into adulthood, greater autonomy implies greater volitional agency or choosing goals and making decisions in a specific context (Ryan & Deci, 2000). It is reasonable to anticipate that older adolescents would have greater autonomy than younger adolescents, and the relationships as hypothesized would be more salient for older adolescents than for younger adolescents.

### *Filial Piety and Parental Authority*

Filial piety comprises affective and behavioral principles about how children interact with their parents. These principles describe how children should love, respect, please, honor, and care for their parents to demonstrate their gratitude (Yeh & Bedford, 2003), and how they should consistently obey their parents' wishes

(Chow, 2001). Previous studies have indicated that adolescents from families with a hierarchical relationship between parents and children are less willing to argue with their mothers, and have a greater respect for parental authority (Fulgini, 1998). A study of adolescent filial piety conducted in Hong Kong reported that for adolescents with higher filial piety, maternal control was positively correlated with maternal support, but this relationship was not found in adolescents with lower levels of filial piety (Wong, Leung, & McBride-Chang, 2010). Adolescents who possess a stronger belief in filial piety may respect their parents' teaching and guidance because they believe that their parents have more life experience and wisdom than they do, and they believe that their parents' actions are performed for the children's own good. Therefore, certain aspects of strictness and control, which are perceived as domination, hostility, or mistrust in Western countries, may be perceived as concern and caring by Chinese adolescents.

The concept of filial piety has changed in recent years due to globalization. The values of self-expression, freedom and individuality that characterize Western societies have gradually become common among younger generations of Taiwanese. Yeh (1997) developed a dual filial piety model based on the mixed characteristics of modernity and tradition in present society. This model includes two filial factors, reciprocal filial piety and authoritarian filial piety. Reciprocal filial piety is defined as affection-based gratitude and respect for parents' efforts, while authoritarian filial piety refers to the relationship hierarchies and role obligations that demand children's compliance with parents (Yeh & Bedford, 2003).

Studies examining the implications of the dual filial piety model (Yeh & Bedford, 2003, 2004) have indicated that filial piety is related to the frequency of parent-child conflicts and the strategies selected to resolve these conflicts. Both reciprocal filial piety and authoritarian filial piety are associated with reduced parent-child conflict, but different types of filial piety are related to different conflict solution strategies. Adolescents who possess high reciprocal piety tend to use more reframing strategies (casting a conflict situation into a new context so that both parties can attain their goals without needing to sacrifice) and compromise strategies than adolescents who possess authoritarian filial piety (Yeh & Bedford, 2004). These two filial factors are also relevant to moral guidelines and social conventions. Reciprocal filial piety correlates more closely with morality than with social conventions, whereas authoritarian filial piety is more closely related to social conventions, but not to morality (Yeh & Bedford, 2003). Based on the previous literature, I believe that adolescents with high levels of filial piety (either authoritarian or reciprocal piety) are more likely to endorse the legitimacy of parental authority, feel obligated to obey parental rules, and obey authority.

In addition, Yeh and Bedford (2003, 2004) found that college students tended to have a higher level of reciprocal filial piety than high school students, whereas high school students were more influenced by authoritarian filial piety in terms of conscientiousness. Therefore, I expected that the association between reciprocal filial piety and authority beliefs and obedience would be greater for older

adolescents, whereas the association between authoritarian filial piety and authority beliefs and obedience would be stronger for younger adolescents.

### *Overview and Hypotheses of the Study*

The present study adopted a two-year longitudinal design to investigate the causal relationships among adolescent autonomy, filial piety, beliefs about the legitimacy of authority and the obligation to obey it, and obedience in the personal, multifaceted, and prudential domains. These three social domains were selected because adolescents' beliefs about the legitimacy and obligation to obey may have great relevance to their involvement in problematic behavior, and because more distinct developmental changes have been observed for legitimacy beliefs in these domains (Darling et al., 2008). Adolescents' appeals to personal jurisdiction over these issues as they age reflect their developing autonomy (Smetana & Asquith, 1994). In addition, a two-year longitudinal study design was adopted because identification of the time order of effects is not straightforward unless data are collected at two or more points in time.

I chose dual-concept models of filial piety and autonomy to measure autonomy and filial piety because they better characterize parent-child relationships and adolescent development in present Taiwanese society. Hypothesis 1 predicted the relationship between autonomy and authority beliefs about legitimacy and obligation to obey. Hypothesis 1A predicted that when controlling for beliefs about the legitimacy of authority, the obligation to obey, and actual obedience at Time 1 (T1), adolescents' sense of IA at T1 would be negatively correlated with their beliefs about the legitimacy of authority and the obligation to obey at Time 2 (T2) across different domains. Based on previous study (Ryan & Deci, 2000; Yeh & Yang, 2006), adolescents with high IA believe that they are more competent to make their own decision, and I expected that high IA would have a negative effect on authority beliefs. Hypothesis 1B predicted that adolescents' sense of RA at T1 would be positively correlated with beliefs about the legitimacy of authority and beliefs about obligation at T2 across different domains. The reason is that adolescent with high RA value interpersonal relationship and will comply with their parents' demand due to their genuine love and respect for their parents (Yeh & Yang, 2006).

Secondly, Hypothesis 2 predicted the relationship between filial piety and authority beliefs about legitimacy and obligation to obey. After controlling for authority beliefs and obedience at T1, Hypothesis 2A predicted that adolescent beliefs about authoritarian filial piety at T1 would be positively correlated with beliefs about the legitimacy of authority and the obligation to obey at T2, and Hypothesis 2B predicted that reciprocal filial piety would also positively correlate with two authority beliefs at T2. Filial piety, which is a traditional guideline for children about how to interact with their parents, was found to be associated with decreased parent-child conflict and nonconfrontation coping strategies



when facing parent–child conflict (Yeh & Bedford, 2003). Therefore, I expected that there would be a relationship between adolescent with either high authoritarian filial piety or high reciprocal filial piety and a higher level of authority beliefs.

Furthermore, in the same model, Hypothesis 3 predicted the relationship between authority beliefs at T2 and obedience at T2, in that authority legitimacy would be positively related to obedience (H3A) and that obligation to obey would positively correlate with obedience (H3B). Beliefs about the legitimacy of authority and the obligation to obey serve as the mediators among autonomy, filial piety, and obedience because adolescent obedience to parental rules is determined by adolescents' own internal standards of behavior and their beliefs about their parents' authority (Darling, Cumsille, & Martinez, 2007). Adolescents are most likely to obey their parents in situations where they agree with them, believe that their parents have legitimate authority, and that they are obligated to obey, even when they disagree.

Finally, the literature indicates that as adolescents grow older, they are less likely to believe that parents have legitimate authority over the domain issues, and that they are obligated to obey their parents in case of disagreement (Darling et al., 2008). Studies also show that there are age differences in adolescent autonomy and filial piety (Yeh & Bedford, 2003; Yeh et al., 2007). Hypothesis 4 predicted that age might moderate the causal relationships among autonomy, filial piety, authority beliefs and obedience in the three domains. Based on previous literature, I expected that the relationship between autonomy and authority beliefs would be more salient for older adolescents than for younger adolescents. I also expected that the relationship between authoritarian piety and authority beliefs would be stronger for younger adolescents, whereas the relationship of reciprocal piety with authority beliefs would be greater for older adolescents.

## Method

### *Procedures*

The data reported in this study are part of the National Science Council's project on parental authority. In the summer semester of 2009, invitation letters describing the purpose and procedure of the project were sent to 10 schools located in northwestern Taiwan. Consent was obtained from schools, participants, and the participants' parents. A total of 436 students participated in the study for two consecutive years. The questionnaires were administered to participants at school and in groups. The questionnaires included measures of parental authority, filial piety, parent–child relationships and autonomy. The measures of parent–child relationships were not analyzed in the present study. Participants were contacted and completed the same questionnaires the following summer.

## Participants

At T1, 485 seventh- and 10th-grade students completed the questionnaires. At T2, when the participants were in Grade 8 and the Grade 11, they completed the same questionnaires again. In all, 49 students who participated in the study at T1 did not complete the measures at T2 due to absence on the measurement day. Therefore, at T2, 436 students participated in the second-year study (223 boys, 221 girls; 211 senior high school students; at T1,  $M$  age = 14.28 years,  $SD$  = 0.29 years for the junior high school students;  $M$  age = 17.31 years,  $SD$  = 0.30 years for the senior high school students). There were no significant differences between participants who had missing values and participants who had no missing values at T2 for all measured variables. Parents' educational levels were as follows: 5.9% of fathers and 3.5% of mothers had completed less than 12 years of education, 53.2% of fathers and 62.3% of mothers had completed 12 years of education, and 31% of fathers and 25.6% of mothers had completed more than 16 years of education. The educational levels for 9.5% of fathers and 8.6% of mothers were unidentified.

## Measures

*Parental authority.* The domain-specific Parental Authority Questionnaire (Liu, 2011) was used to measure the adolescents' beliefs about the legitimacy of parental authority, their obligation to obey authority, and their actual obedience to authority. The scale consisted of 27 events or issues. These events, or issue items, were sorted into the following seven social domains: moral, conventional, prudential, personal, multifaceted, friendship, and academic. For the purposes of the present study, I chose events from the personal, prudential, and multifaceted domains. Issue items for the personal domain included the following: "Can not spend too much time playing on the computer (or playing video games)," "Set rules about using pocket money," and "Music cannot be too loud." Issue items from the prudential domain included the following: "Cannot smoke," "Set rules for hygienic habits" (e.g., "washing hands before meals"), and "Cannot drink alcoholic beverages." Issue items from the multifaceted domain included the following: "Clean own room" and "Keep clothes tidy." Participants were asked to answer three questions for each issue: (a) the degree of legitimacy that the adolescent attributed to his or her parents in setting the rule (e.g., Do you think it is legitimate for your parents to set the rule?) on a 4-point Likert-type scale ranging from 0 (*do not agree at all*) to 3 (*agree very much*); (b) whether the adolescent felt obligated to obey the rule even if he or she disagreed with it (e.g., Do you feel obligated to obey the rule even if you disagree?), answering 1 for yes and 0 for no; and (c) the degree to which the adolescent obeyed the rule in reality (e.g., To what extent do you really obey the rule?) on a 4-point Likert-type scale ranging from 0 (*do not obey at all*) to 3 (*completely obey*). The Cronbach's alpha coefficients were .67-.90 for authority legitimacy, .60-.90 for obligation to obey, and .58-.90 for obedience in

the personal, prudential, and multifaceted domains at both times. The Cronbach's alpha coefficients in the personal and prudential domains were higher (alpha values ranged from .73 to .90) than those in the multifaceted domain.

*Filial piety.* The Filial Piety Scale (Yeh & Bedford, 2003) was used to measure the two concepts of reciprocal filial piety and authoritarian filial piety. The instrument used in this study consisted of the short-form Filial Piety Scale, which contained eight items for each filial factor (Yeh, 1997). Participants indicated their agreement with the items on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Examples of items measuring reciprocal filial piety included "hurry home upon the death of a parent, regardless of how far away you live" and "be grateful to your parents for raising you." Items measuring authoritarian filial piety included "live with parents even after your marriage" and "compliment your parents when necessary to save face for them." The Cronbach's alpha coefficients in this study were .87 for reciprocal filial piety and .81 for authoritarian filial piety.

*Autonomy.* The Adolescent Autonomy Scale (Yeh et al., 2007) was used to measure adolescent dual autonomy. The scale consists of 12 items, six measuring IA and six measuring RA. Each subscale includes two items pertaining to each of the three aspects of autonomy: cognitive, emotional, and functional. Examples of items pertaining to IA include "I always know what I want" and "I always feel confident about my own decisions." Examples of items pertaining to RA include "When making a decision, I evaluate the practicalities of both my ideas and my parents' suggestions" and "I am always able to make things satisfactory for both parties even when my parents' expectations are different from mine." Participants indicated their agreement with each item on a 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The Cronbach's alpha coefficients for these two subscales in this study were .79 and .80 for IA and RA, respectively.

## Results

### *Descriptive Statistics and Correlational Analyses*

Means and standard deviations for the junior and senior high school students are displayed in Table 1. Independent sample *t*-tests revealed that the senior high school students displayed a lower level of authoritarian filial piety, authority legitimacy, and obedience in the prudential and multifaceted domains at both times than the junior high school students (all  $ps < .05$ ).

Correlational analyses were conducted separately for each grade group. As shown in Table 2, for the junior high school students, IA and RA were positively associated with authoritarian and reciprocal filial piety at T1, and beliefs about legitimacy, obligation, and obedience in the personal, prudential, and multifaceted domains at T1 and T2 (all  $ps < .05$ ). Authoritarian filial piety and reciprocal filial piety were also positively correlated with the other variables (all  $ps < .05$ ). For the

**TABLE 1. Means and Standard Deviations Among Observed Variables, by Grade**

Variable	Junior ( <i>n</i> = 225)		Senior ( <i>n</i> = 211)		<i>t</i> (434)	<i>p</i>	95% CI		Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>	
Time 1									
Relating autonomy	4.26	1.09	4.25	0.88	-0.11	.92	-0.18	0.20	-.01
Individuating autonomy	4.10	0.95	3.95	0.87	-1.74	.08	-0.02	0.32	-.16
Reciprocal filial piety	5.17	0.81	5.25	0.71	-1.05	.30	-0.22	0.07	-.11
Authoritarian filial piety	3.43	0.98	2.89	0.80	-6.36	<.001	-0.38	0.71	-0.60
Obligation									
Personal	0.71	0.38	0.70	0.36	-0.21	.83	-0.06	0.08	-.03
Prudential	0.86	0.23	0.82	0.25	-1.64	.10	-0.01	0.08	-.17
Multifaceted	0.87	0.26	0.85	0.28	-0.63	.53	-0.03	0.07	-.07
Legitimacy									
Personal	2.80	0.95	2.69	0.76	-1.35	.18	-0.05	0.27	-.13
Prudential	3.34	0.63	3.15	0.57	-3.20	<.010	-0.07	0.30	-.32
Multifaceted	3.33	0.71	3.15	0.63	-2.78	.01	-0.05	0.31	-.27
Obedience									
Personal	2.50	0.85	2.47	0.69	-0.49	.62	-0.11	0.18	-.04
Prudential	3.15	0.52	3.00	0.48	-3.04	<.010	-0.05	0.24	-.30
Multifaceted	2.85	0.68	2.69	0.58	-2.67	.01	-0.04	0.28	-.25
Time 2									
Obligation									
Personal	0.72	0.35	0.69	0.35	-1.07	.29	-0.03	0.10	-.09
Prudential	0.86	0.24	0.83	0.25	-1.18	.24	-0.02	0.07	-.12
Multifaceted	0.89	0.25	0.85	0.26	-1.59	.11	-0.01	0.09	-.16
Legitimacy									
Personal	2.81	0.88	2.76	0.71	-0.72	.47	-0.10	0.21	-.06
Prudential	3.32	0.64	3.19	0.57	-2.15	.03	-0.01	0.24	-.21
Multifaceted	3.34	0.63	3.14	0.61	-3.38	<.010	-0.08	0.32	-.32
Obedience									
Personal	2.50	0.79	2.46	0.66	-0.60	.55	-0.09	0.18	-.05
Prudential	3.14	0.56	3.03	0.52	-2.06	.04	-0.00	0.21	-.20
Multifaceted	2.83	0.62	2.71	0.59	-2.13	.03	-0.01	0.24	-.20

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

N = 225 for junior and 211 for senior.

senior high school students (Table 3), the correlations were similar to those found for the younger sample, except that IA at T1 was not significantly correlated with the beliefs about legitimacy, obligation and obedience in the prudential domain at either T1 or T2, or with the beliefs about obligation in the personal domain at either T1 or T2. Moreover, older students' RA was not related to obligation to obey at T2 in the prudential domain, and their authoritarian filial piety was not related to obedience in the multifaceted domain at T2.

**TABLE 2. Correlations Among Observed Variables for Junior High School Students**

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
1. Rel. Auto. (T1)	—																						
2. Ind. Auto. (T1)	.60***	—																					
3. Recip. F. P. (T1)	.67***	.47***	—																				
4. Author. F. P. (T1)	.68***	.44***	.56***	—																			
5. Obl.-person. (T1)	.43***	.28***	.35***	.50***	—																		
6. Obl.-pru. (T1)	.41***	.27***	.39***	.38***	.71***	—																	
7. Obl.-multi. (T1)	.36***	.29***	.42***	.36***	.62***	.73***	—																
8. Leg.-person. (T1)	.55***	.41***	.50***	.61***	.71***	.52***	.45***	—															
9. Leg.-pru. (T1)	.51***	.36***	.49***	.54***	.57***	.68***	.49***	.73***	—														
10. Leg.-multi. (T1)	.46***	.44***	.53***	.51***	.51***	.53***	.69***	.69***	.68***	—													
11. Obed.-person. (T1)	.45***	.33***	.40***	.43***	.63***	.43***	.38***	.73***	.54***	.50***	—												
12. Obed.-pru. (T1)	.38***	.28***	.39***	.39***	.48***	.63***	.50***	.53***	.73***	.51***	.60***	—											
13. Obed.-multi. (T1)	.30***	.35***	.41***	.22***	.33***	.34***	.56***	.34***	.34***	.62***	.53***	.53***	—										
14. Obl.-person. (T2)	.33***	.17*	.20*	.43***	.57***	.47***	.37***	.50***	.44***	.34***	.42***	.39***	.20**	—									
15. Obl.-pru. (T2)	.29***	.21*	.25***	.35***	.50***	.52***	.44***	.38***	.41***	.35***	.30***	.38***	.25***	.71***	—								

(Continued on next page)

**TABLE 2. Correlations Among Observed Variables for Junior High School Students (Continued)**

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
16. Obl._multi. (T2)	.20**	.16*	.24***	.31***	.39***	.41***	.42***	.33***	.32***	.33***	.27***	.32***	.27***	.64***	.66***	—	—	—	—	—	—	—	—
17. Leg._person. (T2)	.36***	.17**	.27***	.46***	.54***	.35***	.32***	.63***	.48***	.45***	.52***	.40***	.30***	.70***	.45***	.40***	—	—	—	—	—	—	—
18. Leg._pru. (T2)	.36***	.22**	.35***	.43***	.53***	.47***	.40***	.58***	.60***	.52***	.45***	.49***	.32***	.52***	.59***	.40***	.67***	—	—	—	—	—	—
19. Leg._multi. (T2)	.34***	.26***	.36***	.41***	.45***	.37***	.44***	.52***	.43***	.59***	.45***	.37***	.42***	.50***	.45***	.57***	.68***	.64***	—	—	—	—	—
20. Obed._person. (T2)	.34***	.15*	.31***	.34***	.44***	.30***	.28***	.49***	.39***	.35***	.64***	.46***	.38***	.56***	.37***	.35***	.66***	.47***	.50***	—	—	—	—
21. Obed._pru. (T2)	.24***	.19**	.34***	.28***	.36***	.35***	.31***	.47***	.50***	.42***	.47***	.55***	.39***	.41***	.50***	.35***	.48***	.69***	.49***	.60***	—	—	—
22. Obed._multi. (T2)	.28***	.27***	.33***	.25***	.23**	.23**	.33***	.27***	.30***	.37***	.34***	.33***	.47***	.32***	.29***	.40***	.31***	.29***	.52***	.50***	.51***	—	—

*Note.* Intercorrelations for junior high school students ( $n = 225$ ) are presented. T1 = Time 1; T2 = Time 2; Rel. Auto. = relating autonomy; Ind. Auto. = individualizing autonomy; Recip. F. P. = reciprocal filial piety; Author. F. P. = authoritarian filial piety; Obl.\_person. = obligation-personal; Obl.\_pru. = obligation-prudential; Obl.\_multi. = obligation-multifaceted; Leg.\_person. = legitimacy-personal; Leg.\_pru. = legitimacy prudential; Leg.\_multi. = legitimacy multifaceted; Obed.\_person. = obedience-personal; Obed.\_pru. = obedience-prudential; Obed.\_multi. = obedience-multifaceted.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

**TABLE 3. Correlations Among Observed Variables for Senior High School Students**

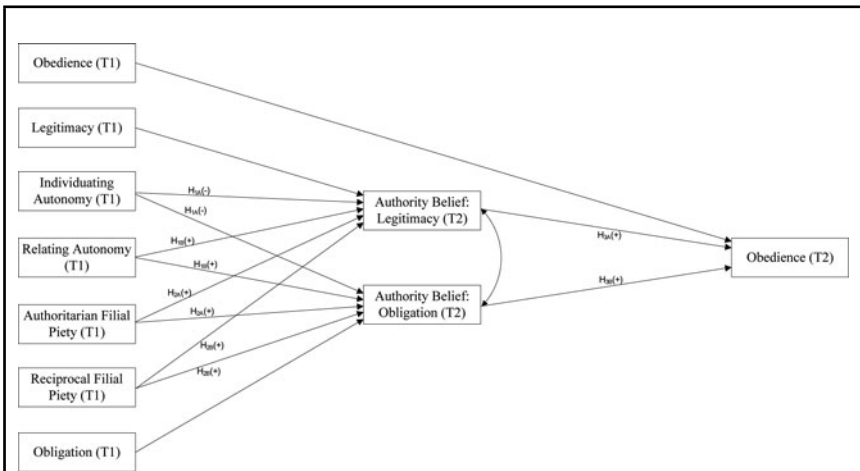
Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
1. Rel. Auto. (T1)	—																						
2. Ind. Auto. (T1)	.44***	—																					
3. Recip. F. P. (T1)	.51***	.24***	—																				
4. Author. F. P. (T1)	.41***	.17*	.28***	—																			
5. Obl.-person. (T1)	.26***	.11	.24***	.31***	—																		
6. Obl.-pru. (T1)	.26***	.06	.23**	.35***	.64***	—																	
7. Obl.-multi. (T1)	.26***	.18*	.26***	.30***	.58***	.65***	—																
8. Leg.-person. (T1)	.35***	.25***	.36***	.38***	.61***	.45***	.44***	—															
9. Leg.-pru. (T1)	.40***	.12	.41***	.43***	.40***	.61***	.45***	.66***	—														
10. Leg.-multi. (T1)	.39***	.21**	.38***	.40***	.45***	.47***	.64***	.63***	.67***	—													
11. Obed.-person. (T1)	.35***	.15*	.40***	.40***	.53***	.39***	.36***	.66***	.56***	.49***	—												
12. Obed.-pru. (T1)	.39***	.09	.31***	.30***	.30***	.50***	.33***	.34***	.65***	.39***	.54***	—											
13. Obed.-multi. (T1)	.23**	.29***	.17*	.20*	.28***	.29***	.47***	.31***	.32***	.54***	.47***	.38***	—										
14. Obl.-person. (T2)	.19**	.11	.21**	.31***	.55***	.48***	.50***	.41***	.34***	.38***	.35***	.26***	.25***	—									
15. Obl.-pru. (T2)	.13	.09	.17*	.34***	.42***	.45***	.39***	.34***	.33***	.31***	.30***	.25***	.25***	.67***	—								
16. Obl.-multi. (T2)	.15*	.16*	.21**	.30***	.44***	.40***	.50***	.38***	.31***	.42***	.30***	.23*	.34***	.63***	.71***	—							
17. Leg.-person. (T2)	.25***	.20**	.21**	.30***	.45**	.29***	.34***	.58***	.45**	.44**	.47***	.26***	.25***	.55***	.38***	.35***	—						
18. Leg.-pru. (T2)	.20**	.14*	.18**	.35***	.33***	.38***	.28***	.45***	.55***	.38***	.41***	.34***	.33***	.41***	.56***	.40***	.63***	—					
19. Leg.-multi. (T2)	.18*	.20**	.19**	.28***	.33***	.33***	.37***	.40***	.42***	.50***	.34***	.24***	.39***	.36***	.41***	.56***	.58***	.66***	—				
20. Obed.-person. (T2)	.24***	.17*	.22**	.24**	.38***	.26***	.31***	.42***	.34***	.33**	.53***	.33***	.41***	.54***	.30***	.29***	.59***	.41***	.32***	—			
21. Obed.-pru. (T2)	.28***	.11	.23**	.31***	.16*	.29***	.21**	.20**	.43***	.28***	.40***	.53***	.37***	.33***	.45***	.32***	.35***	.60***	.35***	.54***	—		
22. Obed.-multi. (T2)	.19**	.22**	.10	.27***	.25***	.22**	.34***	.23**	.25***	.31***	.39***	.26***	.49***	.31***	.31***	.45***	.30***	.36***	.52***	.51***	.51***	—	

Note. Intercorrelations for senior high school students ( $n = 211$ ) are presented. T1 = Time 1; T2 = Time 2; Rel. Auto. = relating autonomy; Ind. Auto. = individuating autonomy; Recip. F. P. = reciprocal filial piety; Author. F. P. = authoritarian filial piety; Obl.-person. = obligation.personal; Obl.-pru. = obligation-prudential; Obl.-multi. = obligation-multifaceted; Leg.-person. = legitimacy.personal; Leg.-pru. = legitimacy-prudential; Leg.-multi. = legitimacy-multifaceted; Obed.-person. = obedience.personal; Obed.-pru. = obedience-prudential; Obed.-multi. = obedience-multifaceted.  
\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

*Mediating Effects of Beliefs About Authority Legitimacy and the Obligation to Obey on the Relationships Between Autonomy, Filial Piety, and Obedience*

To test the first three hypotheses, I proposed a model in which types of autonomy and piety at T1 are associated with beliefs about authority legitimacy and the obligation to obey at T2. These beliefs about authority legitimacy and the obligation to obey at T2 were associated with obedience at T2 after controlling for beliefs about authority legitimacy and the obligation to obey at T1 and obedience at T1. The hypothesized model is presented in Figure 1.

Structural equation modeling (SEM) techniques were applied using the Mplus 5.0 software package (Muthén & Muthén, 2007) to evaluate the hypothesized model for each of the domains individually. The chi-square statistic ( $\chi^2$ ), comparative fit index (CFI), root mean square of approximation (RMSEA), and the standardized root mean square residual (SRMR) were used to evaluate the fit of the models (Kline, 1998). CFIs above .90, RMSEAs less than .08 (MacCallum, Browne, & Sugawara, 1996), and SRMRs less than .05 (Hu & Bentler, 1999)



**FIGURE 1. Hypothesized model: mediation model of the relationships between obedience, legitimacy, reciprocal filial piety, authoritarian filial piety, relating autonomy, individuating autonomy, and obligation.  $H_1$  = Autonomy (Individuating Autonomy vs. Relating Autonomy)  $\rightarrow$  Authority Belief (Legitimacy vs. Obligation to Obey).  $H_2$  = Filial Piety (Authoritarian Filial Piety vs. Reciprocal Filial Piety)  $\rightarrow$  Authority Belief (Legitimacy vs. Obligation to Obey).  $H_3$  = Authority Belief (Legitimacy vs. Obligation to Obey)  $\rightarrow$  Obedience.  $H_4$  = Age as the moderator of the structural model.**



indicate a close fit for a model and were used as the criteria for evaluating model fit.

Before SEM analysis, Normal Q-Q plot and frequency histogram with SPSS 12.0 were used to check the normality of the variables. The results indicated that all measured variables were normally distributed. As indicated in Table 4, the comparative indices of the models indicated a good model fit, except that the RMSEA was .085 (larger than .08) for the personal domain. The RMSEA value  $\leq .05$  can be considered as a good fit, values between .05 and .08 can be considered as an adequate fit, and values between .08 and .10 can be considered as a mediocre fit, whereas values  $> .10$  are not acceptable (Browne & Cudeck, 1993). According to MacCallum et al. (1996), a 90% confidence interval (CI) around the point estimate enables an assessment of the precision of the RMSEA estimate. The lower boundary of the confidence interval should include zero for an exact fit and be close to .05 for a close fit. In the personal domain, the CI of the RMSEA is .05–.10, suggesting an acceptable fit. According to the results, Hypothesis 1 was not supported. IA and RA at T1 were not related to beliefs about authority legitimacy and obligation to obey at T2 in the three domains. Hypothesis 2 was partially supported. In the three domains, authoritarian filial piety at T1 was positively and significantly related to beliefs about the legitimacy of authority and the obligation to obey at T2 (H2A), whereas reciprocal filial piety did not correlate with beliefs about legitimacy and obligation to obey (H2B). Hypothesis 3 was supported. Beliefs about authority legitimacy and obligation to obey were positively associated with obedience. Based on these results, the model reveals that only authoritarian filial piety predicted authority beliefs about legitimacy and obligation to obey, and both authority beliefs in turn were associated with obedience, suggesting a mediating effect of authority beliefs on the relation between authoritarian filial piety and obedience.

#### *Age as the Moderator for the Mediating Models*

To examine Hypothesis 4 regarding whether the best-fitting model fit the data for the junior high school students and the senior high school students equally well, I first analyzed the models separately for the two subsamples (junior high school students and senior high school students). As shows that the comparative indices of the models indicate a good model fit for the senior high school sample in the three domains. However, for the junior high school sample, the RMSEA was larger than .08 in both the personal domain (RMSEA = .10) and in the prudential domain (RMSEA = .09). The lower boundary of the 90% CI was .07 in the personal domain, and .05 in the prudential domain, indicating an acceptable model fit in the prudential domain, and a poor model fit in the personal domain. The proposed model seems not to be suitable for the junior high school sample in the personal domain. I further used a multigroup analysis to examine the moderating effects of grade on the association between variables in the prudential

**TABLE 4. Fit Indices of the Models for Different Groups of the Samples and for Model Comparison**

Model	$\chi^2$	df	CFI	RMSEA	SRMR	$\Delta\chi^2$	$\Delta df$	$\Delta\chi^2/\Delta df$
Prudential domain								
Model 1: Total sample	25.18***	10	.98	.06	.01			
Model 2: Junior high school	29.15***	10	.96	.09	.02			
Model 3: Senior high school	11.27***	10	.99	.02	.01			
Model 4: All parameters vary across grade groups	35.83***	20	.98	.06				
Model 5: All factor loadings constrained to be equal in the two grade groups	44.60***	34	.99	.04				
Difference between Model 4 and Model 5						8.77	14	0.87
Multifaceted domain								
Model 1: Total sample	23.27***	10	.97	.05	.02			
Model 2: Junior high school	13.14***	10	.99	.03	.02			
Model 3: Senior high school	19.79***	10	.96	.06	.03			
Model 4: All parameters vary across grade groups	29.99***	20	.98	.05				
Model 5: All factor loadings constrained to be equal in the two grade groups	38.72***	34	.99	.03				
Difference between Model 4 and Model 5						8.74	14	0.85
Personal domain								
Model 1: Total sample	41.30***	10	.96	.08	.03			
Model 2: Junior high school	38.19***	10	.94	.10	.03			
Model 3: Senior high school	15.01***	10	.98	.04	.02			

*Note.*  $N = 436$  (225 for junior and 211 for senior high sample). There is no model comparison in the personal domain due to the model rejection for junior high school sample. CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual.

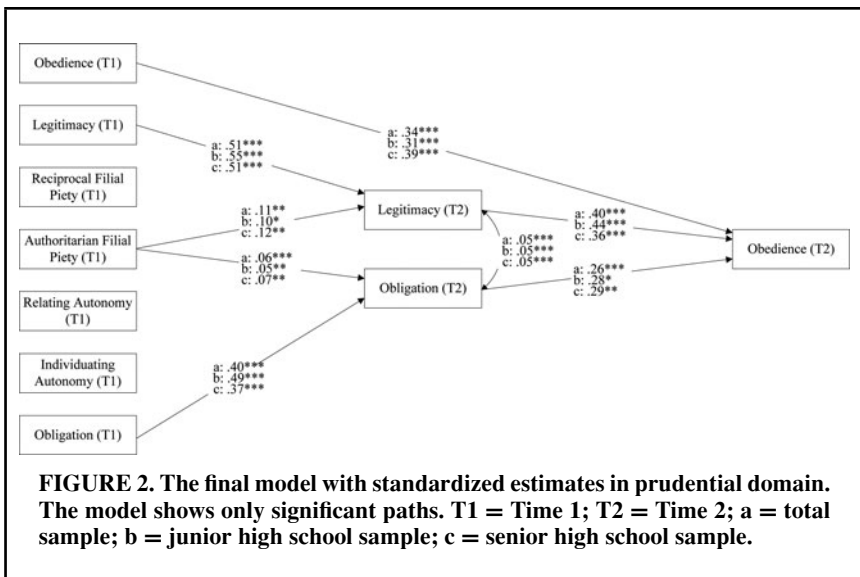
\*\*\* $p < .001$ .

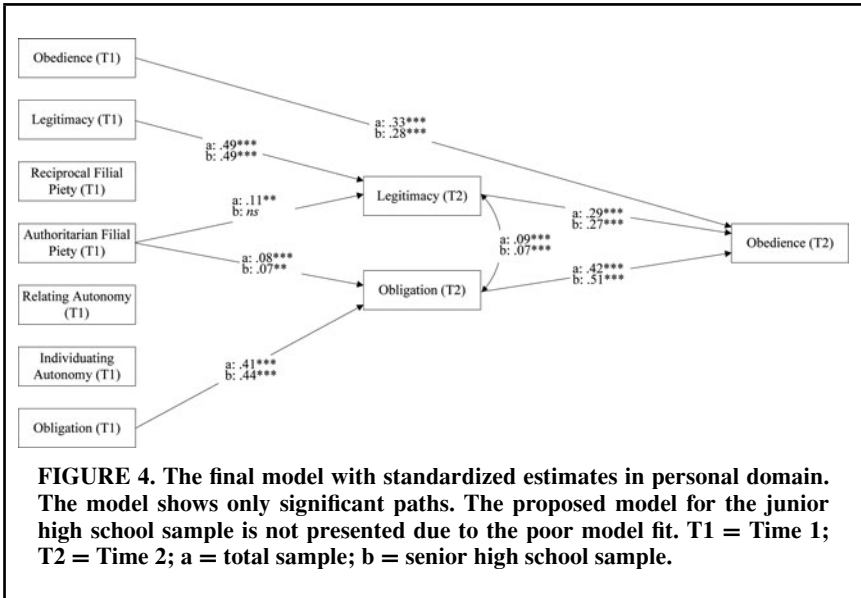
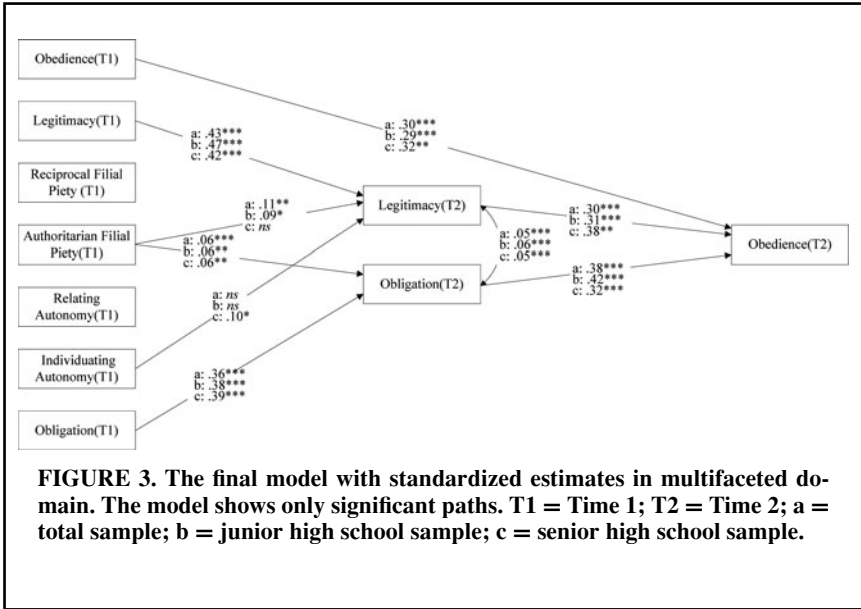
and multifaceted domains. In this procedure, a baseline model (i.e., a multigroup model with all paths freely estimated) was established and used in comparison with models with cross-group constraints (all paths with equality constraints). Models with cross-group constraints that did not fit the data as well as the baseline

model were rejected, indicating that particular conditions did not apply equally to junior and senior high school students. As shown in Table 4, the constraint models were not significantly different from the baseline models in two domains, revealing that the model structures did not differ between age groups. Hypothesis four was not supported. However, although the overall model structures were not different for the senior high school students and the junior high school students in the multifaceted domain, authoritarian filial piety was not significantly related to beliefs about authority legitimacy for the senior high school students. IA was positively related to beliefs about authority legitimacy in the multifaceted domain for the senior high school students ( $\beta = .10, p < .05$ ) but not for the junior high school students. Figures 2–4 present the results of the model analyses in the personal, multifaceted, and prudential domains.

### Discussion

In the present study, I investigated how adolescents' autonomy and filial piety influenced their beliefs about authority legitimacy and the obligation to obey, and their obedience in the personal, prudential, and multifaceted domains. The results partially supported the proposed hypotheses. Hypothesis 1 was not supported, and the results for autonomy did not match the predicted pattern. Hypothesis 2 was partially supported, and Hypothesis 3 was fully supported. In the three domains, authoritarian filial piety predicted beliefs about authority legitimacy and





the obligation to obey, and beliefs about authority legitimacy and the obligation to obey further predicted obedience. Hypothesis 4 was not supported. The structural models have no age difference in the multifaceted and prudential domains, but the hypothesized model only fit well for the senior high school sample in the personal domain. Discussion of these results is provided subsequently.

### *The Role of Autonomy in Authority Beliefs*

Hypothesis 1 predicted that in the three domains, IA would negatively correlate with beliefs about authority legitimacy and obligation to obey, and that RA would positively correlated with beliefs about authority legitimacy and obligation to obey. Unexpectedly, neither IA nor RA predicted beliefs about authority legitimacy and the obligation to obey in the structured model. It is possible that filial piety is the dominant predictor in the model and that it interferes with the predicting effect of autonomy on authority beliefs. When filial piety was removed from the hypothesized model, the results indicated a poor fit of the model and nonsignificant relationships between autonomy and authority beliefs. The results indicate that autonomy does not predict beliefs about authority. Nevertheless, correlational analyses revealed small to medium correlations between the variables of autonomy and beliefs about authority, with stronger correlations between autonomy and authority legitimacy and weaker correlations between autonomy and the obligation to obey. The results suggest that autonomy and conformity to authority are related but do not follow a causal relationship. Autonomy does not necessarily cause a decrease in adolescents' beliefs about parental authority. This might agree with previous findings in that conformity to parents' expectations is complementary to adolescents' autonomy (Peterson et al., 1999).

Although neither IA nor RA affected parental authority, the reasons for this lack of effect may differ for each type of autonomy. The lack of a relationship between RA and parental authority revealed that RA, while likely to cause adolescents to consider and respect others' opinions, did not predict their beliefs about authority legitimacy and the obligation to obey for the personal, multifaceted, and prudential issues. RA, defined as striving for social identity and valuing interpersonal harmony, is associated with egalitarianism (Yeh & Bedford, 2003, 2004). A study of parent-child relationships in Taiwan reported that most parents described their relationship with their children as friend-like, although this finding could be restricted to democratic families (Lin & Wang, 1995). It is possible that adolescents who possess a high level of RA respect their parents' opinions and expect reciprocal respect from their parents for their own opinions, so the legitimacy of parental authority is negotiated between parents and adolescents.

In contrast, the nonsignificant relationship between IA and parental authority may suggest that adolescents with high IA did not endorse parental authority

legitimacy and obligation to obey because they believed they should be self-determined over the issues. One exception was found in the model for older adolescents in the multifaceted domain, which showed a positive relationship between IA and authority legitimacy. This may suggest that the predicting effect of IA on authority beliefs varies by age and domain. This finding is further addressed in the next following section of age and domain differences in the mediating model.

### *The Role of Filial Piety in Authority Beliefs*

Hypothesis 2 predicted that filial piety, either authoritarian or reciprocal, would positively predict beliefs about authority legitimacy and the obligation to obey. Only the results for authoritarian filial piety supported this hypothesis. The results reveal that adolescents with higher authoritarian filial piety are more likely to recognize the legitimacy of parental authority and to feel obligated to obey rules, even if they disagree with their parents' commands. Adolescents who possess stronger authority beliefs are more likely to follow parental demands than are adolescents who have weaker authority beliefs. On the other hand, reciprocal filial piety did not show any predicting effect on authority beliefs. Reciprocal filial piety includes affective components, is mainly based on long-term parent-child interaction, and is more relevant to morality. In contrast, authoritarian filial piety involves role obligation and self-suppression to fulfill one's parents' needs, and is more closely related to social conventions (Yeh & Bedford, 2003, 2004). The personal, prudential, and multifaceted issues are usually considered by parents as legitimately subject to parental jurisdiction on conventional and psychological bases (Smetana & Asquith, 1994). Therefore, when adolescents had a higher level of authoritarian filial piety, they were more likely to recognize the legitimacy of authority and to feel obligated to obey rules than were adolescents who showed a higher level of reciprocal filial piety. However, this result does not imply that traditional authoritarianism dominates parent-child interactions in Taiwan, because adolescents in the present study reported a higher level of reciprocal filial piety than authoritarian filial piety (reciprocal,  $M = 5.21$ ,  $SD = 0.76$ ; authoritarian,  $M = 3.17$ ,  $SD = 0.94$  for the total sample). The results support a conceptual distinction between reciprocal and authoritarian filial piety and their relationship with parental authority. For adolescents who showed high levels of reciprocal filial piety, loving, respecting, and appreciating their parents' efforts did not translate into complete obedience to parental demands.

### *Age and Domain Differences in the Mediating Models*

Hypothesis 4 predicted that age might moderate the hypothesized model. The results did not support the hypothesis, revealing that the proposed model structure did not vary by different age group. More specifically, the hypothesized

model although was supported for the total sample in the three domains, it did not fit well for the junior high school sample in the personal domain. A previous study suggests that adolescents' rejection of parental authority over personal issues increases from early to middle adolescence (Smetana, 2000). In a four-year longitudinal study, Darling et al. (2008) found that early adolescents experienced a rapid decline in their endorsement of parental authority and obligation to obey in the personal domain. In the present study, the means of authority beliefs and obedience in the personal domain at both times for younger adolescents were not statistically different from those of the older adolescents. The younger adolescents' perceived autonomy was also at a similar level to that of the older adolescents (see Table 1). These results seem to indicate that early adolescence is a period in which adolescents have a strong desire for autonomy, and a decline in the endorsement of parental authority over personal issues reflects a realignment of power relations between parents and adolescents (Darling et al., 2008). I speculate that the relationship among filial piety, autonomy, and parental authority may be more complex during early adolescence, and that other factors may influence this relationship.

Furthermore, although the results of the model comparison analysis reveal no significant differences in the model structures for the two samples, the path relations between variables were found to be slightly different between groups across the two domains. In the prudential domain, authoritarian filial piety was positively related to authority legitimacy and obligation to obey for both samples, and the relations were slightly stronger for the older adolescents than they were for the younger adolescents (though the path relationships were not statistically different). Compared to the personal and multifaceted issues, prudential issues were more likely to be seen as legitimately subject to parental authority (Smetana & Asquith, 1994). Adolescents with higher authoritarian filial piety (especially older adolescents) may consider parents as having the legitimacy to set rules regarding drinking, smoking, and curfew time because parents do this for their personal safety, and they may thus feel obligated to obey the rules even if they disagree. Furthermore, in the multifaceted domain, authoritarian filial piety was positively related to authority legitimacy for only younger adolescents, and was positively related to obligation to obey for both age groups. Meanwhile, IA displayed a positive predicting effect of authority legitimacy for only older adolescents. The findings indicate that IA rather than authoritarian filial piety makes older adolescents endorse their beliefs about the legitimacy of parental authority, suggesting that as adolescents age and become more self-identified, their values become more congruent with their parents' values in certain respects, such as rules regarding multifaceted issues. When values are thought to be primarily self-determined, adolescents are less likely to reject them than to recognize the legitimacy of authority. However, when they disagree with their parents' rules, adolescents with higher authoritarian filial piety, either younger or older, still feel obligated to obey the rules, implying that traditional filial piety still has a powerful influence on them.

*Implications and Limitations*

This study included an indigenous concept of filial piety and a Western concept of autonomy as predictors of adolescents' beliefs about parental authority and obedience. The present study contributes to the literature by adopting the duality approach of socialization to describe the coexistence of individualistic and collectivistic orientations and tradition and modernity within cultures. The strengths of the present study include the longitudinal design and age diversity of the sample. The findings with respect to the relationship between filial piety and parental authority demonstrate that the principles that guide adolescents' interactions with their parents are primarily affective and grateful in today's society. However, the traditional role of obligation continues to exist and to affect adolescents' beliefs about authority. The findings about the relationship between autonomy and parental authority reveal that adolescents' autonomy is positively related to beliefs about parental authority, but no causal relationship was discovered between the two variables. Although previous studies have indicated that adolescent autonomy decreases their beliefs about the legitimacy of parental authority (Kuhn & Laird, 2011), most of these studies were cross-sectional, or defined autonomy as the binary opposite of heteronomy. By adopting a two-year design and a broader definition of autonomy, the results of the present study suggest that parental authority and autonomy do not necessarily show a causal relationship; that is, when adolescents achieve greater autonomy, they neither deny parental authority because of their growing independence nor completely accept parental authority due to the familial demands of interdependence. Autonomy and parental authority are considered important and complementary for adolescents' development. The overall findings of this study support the idea that individualistic and collectivistic orientations coexist to varying degrees within cultures (Imamoglu, 1998, 2003; Kagitcibasi, 2007; Peterson, 1995). Independence is encouraged, but interdependence is also strongly valued. Similarly, although affective parent-child interactions have become more prevalent over time, they have not entirely replaced interactions based on role obligation. Prior research has indicated that Chinese parents tend to use warm and supportive parent-child interactions to encourage individual autonomy (Liu & Yeh, 2011) as well as to employ child-rearing strategies (e.g., reasoning, monitoring, support) that foster an interdependent relationship climate by encouraging adolescent conformity to their expectations (Peterson, Bush, Wilson, & Hennon, 2005). Further investigation is needed to determine how parents guide adolescents to fulfill their expectations at the relationship level and simultaneously encourage autonomy at the individual level for different social issues.

Although this two-year longitudinal study clarified the causal relationships among autonomy, filial piety, and behavior, and beliefs about parental authority, the reciprocal relationships between these variables are not yet clear. The present results indicate that adolescents with higher authoritarian filial piety are more likely to increase their belief in parental authority, but I do not know the effects of



authority beliefs on filial piety. Further long-term studies should include at least three different time points to clarify the reciprocal relationship. Previous studies have revealed that adolescents' attitudes toward parental authority and autonomy change as they grow (Smetana & Asquith, 1994). A long-term study design would allow direct observations of the developmental changes in adolescents' autonomy, filial piety, and obedience to parental authority as well as the changes in the relationships among these variables. A limitation of the present study is that the sample of this study was recruited from a single geographic region, and the findings cannot be generalized to the population of Taiwan or to Chinese in other countries, such as Mainland China, Hong Kong, or Singapore. Although these societies share a similar cultural heritage, different political systems have prevailed for the last five decades, resulting in significantly different sociocultural responses within families. Finally, the present study relies on adolescents' self-reports. However, adolescents' beliefs may be affected by their interpretation of the situation and by the behaviors of others. Further studies should include more objective assessments, such as direct observations or the inclusion of parents' reports.

#### AUTHOR NOTE

**Yih-Lan Liu** is a professor at the Institute of Education, National Chiao Tung University, Taiwan, R. O. C. Her research focuses on parent-adolescent interaction, adolescent social and emotional development, and psychosocial adjustment.

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*Original manuscript received November 11, 2011*

*Final version accepted May 27, 2012*