

The Goodness of Fit in Autonomy Timetable Expectations between Asian-American Late Adolescents and their Parents

Linda P. Juang
University of Jena, Germany

Jacqueline V. Lerner
Boston College, USA

John P. McKinney and Alexander von Eye
Michigan State University, USA

The purpose of this study was to examine the goodness of fit of autonomy timetable expectations between Asian-American late adolescents and their parents. The “goodness of fit” model (Lerner & Lerner, 1983; Thomas & Chess, 1977) was used as a framework to guide this study. All 99 Asian-American late adolescents completed self-report questionnaires. Results indicate that, overall, late adolescents would have liked to experience an earlier timetable of autonomy than their parents had allowed. However, there was variation in the sample, that is, there were some adolescents who did not want a different timetable than they were allowed. Also, it was found that the goodness of fit between the autonomy timetable that adolescents would have liked and what their parents had allowed was a better predictor of adolescent adjustment than simply knowing the timetable of autonomy that adolescents had actually experienced. Late adolescents who experienced a good fit with perceived parental expectations of autonomy reported higher levels of self-esteem and emotional closeness to their parents, and lower levels of depression, behaviour misconduct, and insecurity with parents, compared to their poor fitting counterparts. It is proposed that the concept of “goodness of fit” is a useful framework for the investigation of autonomy development, and subsequent adjustment in Asian-American late adolescents.

Requests for reprints should be sent to Dr Linda P. Juang, University of Jena, Department of Developmental Psychology, Am Steiger 3/1, 07743 Jena, Germany; e-mail: S7juli@rz.uni-jena.de.

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INTRODUCTION

Throughout the lifespan, individuals deal with the issue of autonomy (Baltes & Silverberg, 1994; Erikson, 1963; Steinberg, 1990). Autonomy is especially salient during adolescence as expectations and opportunities for independence broaden at this time. The successful development of a healthy sense of autonomy, while simultaneously remaining connected to one's parents, is a major task to negotiate.

The development of autonomy is one potential area of disagreement for adolescents whose parents are immigrants. Sue and Sue (1990) state that adolescents of immigrant parents are likely to experience conflict due to the stressfulness of attempting to juggle traditional values with non-traditional values—values that may occasionally oppose one another. Parents immigrating to a new culture must deal with the reality that although some of their values will be passed on to their children, their children will also acquire values in the new culture that may differ from their traditional values. This discrepancy in cultural values may create a context where values concerning autonomy, clash.¹ Nevertheless, not all adolescents of immigrant parents undergo such struggles. This study seeks to understand the meaning and implications to the variations in Asian immigrant families in the US regarding the development of late adolescent autonomy. Asian and American² cultures differ in their views on autonomy, and, as a consequence, some Asian-American late adolescents may have difficulty integrating these two competing viewpoints. In Asian societies the welfare of the community is emphasised rather than the individual. Group needs take precedence over individual needs. Moreover, the expression of individual needs and desires are considered selfish (Matsuoka, 1990). What is valued is conformity, not independence. For

¹ For example, Sue and Sue (1990) describe in one of their case studies a 20-year-old Asian-American male who was experiencing severe headaches and somatic complaints. He sought counselling when there seemed to be no medical, organic reasons for his symptoms. It became apparent he was upset that his parents expected him to graduate quickly and find a good job, and thereafter assume financial responsibility for his younger brothers and sisters. He viewed this as a burden that was becoming overwhelming. It was a conflict of independence between the young adult and his parents where each held differing values, or beliefs on the appropriate level of autonomy regarding decisions on career and family responsibilities. In other words, as a result of living in the US this young adult acquired values regarding independence that were incongruent to his parents' values.

² The use of the terms "American" and "Asian" in no way suggests that these are homogeneous groups. Furthermore, it is recognised that there is no "typical" Asian-American late adolescent. However, because this study aimed to understand Asian-American late adolescents in general, it was considered appropriate to use the term "Asian" to describe Asians of various backgrounds.

example, the Japanese have a saying that exemplifies their belief in collectivism: "The nail that sticks out gets pounded". Individuals who adopt the perspective of collectivism will emphasise maintaining connectedness to the family and to the community, rather than autonomy (Hui & Villareal, 1989). In contrast, the notion of individualism operates in the US. The needs and rights of an individual are emphasised. Self-reliance, independence, and personal freedom are positively valued and emphasised (Rosenthal & Bornholt, 1988).

Asian parents who hold traditional Asian values may desire and encourage autonomy expectations that are incongruent with the expectations or values that their Asian-American adolescents are internalising. Given that adolescents may be more exposed to the ideals of the majority culture (e.g. by attending school and interacting with peers), they may acquire values of the majority culture more quickly than their parents (Rosenthal, Bell, Demetriou, & Efklides, 1989). This may create a context where adolescents "clash" with their more traditional parents over attitudes and behaviours (Szapocznik & Kurtines, 1980).

Feldman and Rosenthal (1990, 1991) compared age expectations of behavioural autonomy in Hong Kong and American adolescents. In general, Hong Kong youths expected behavioural autonomy (i.e. everyday life management in certain domains) at a later age than their American peers. This could be attributed to the culture of collectivism in Asia where conformity, not independence, is highly valued. As such, behaviours demonstrating independence are not required until a later age (Rosenthal & Bornholt, 1988). Indeed, Hong Kong adolescents described themselves as "placing less value on individualism, outward success and individual competence, and more value on tradition and universal prosocial behaviours . . .".

Feldman and Rosenthal's studies indicate that parents from Asian cultures promote autonomous behaviours at a later age compared to parents from Western cultures. Subsequently, due to the differences between Western and Asian cultures, discrepant, and sometimes opposing values may arise for Asian-American adolescents and their immigrant parents, leading to conflicts within the family (Nguyen, 1992). For instance, a study by Copeland, Hwang, and Brody (1996), compared Asian-American, Asian-International, and European-American late adolescents on issues involving family relationships and adolescent turmoil. It was found that Asian-Americans described themselves as being in more turmoil over issues of independence (e.g. "I feel I have obligations to my mother/father that I wish I didn't have") compared to European-Americans. Late adolescents who felt more conflicted over these independence issues were more depressed, more lonely, and reported lower self-esteem.

To investigate the implications for late adolescents who, compared to their parents, hold different beliefs concerning the age-appropriateness of certain autonomous behaviours, the “goodness of fit” model (Lerner & Lerner, 1983; Thomas & Chess, 1977) can be applied. This model is one way to conceptualise the important link between the adolescent and the wider context in which they live (Lerner, 1993).

The concept of “goodness of fit” is useful as a means to understand adolescent development and adjustment in several contexts: the home, school, and peers (Lerner, Lerner, & Zabski, 1985; Talwar, Nitz, & Lerner, 1990). According to the model, the degree of fit between the adolescent and contextual demands (whether it be physical surroundings, teacher, or parental expectations, etc.) is predictive of adolescent functioning. If there is a poor fit, the adolescent is more likely to experience poor adjustment, such as more negative parent-adolescent relationships or academic troubles (Talwar et al., 1990). In contrast, if there is a good fit, the adolescent is more likely to experience positive outcomes, such as greater academic competence (Lerner, 1983) or more positive relationships with peers (East et al., 1992).

Eccles and her colleagues (1991) used a similar model of “stage-environment fit” to hypothesise that the goodness of fit between the amount of control a parent yields and an adolescent’s desire for autonomy, will play a part in determining whether an adolescent will experience negative or positive outcomes. These researchers found that poor fit was associated with more conflict in families. For example, in issues such as choosing the amount of involvement with peers or how much say they had in family decision making, some adolescents wanted more autonomy than their parents were willing to give. This lack of fit was linked to lower self-esteem and more misbehaviour in the adolescent when compared to adolescents and parents who experienced good fit.

Some studies on adolescent development that test the goodness of fit model have examined “poor fit” versus “good fit” between adolescent temperamental characteristics and parent’s expectations (e.g. Talwar et al., 1990). However, it has been found that “poor fit” needs to be defined more precisely. Different types of poor fit (e.g. exceeding parental expectations, or falling below parental expectations) have been linked to different outcomes (Juang, Castellino, & Lerner, 1995; Lerner et al., 1985).

In contrast, Eccles et al. (1991) found that two types of poor fit led to *similar* outcomes. In this study, poor fit was divided into two categories—adolescents who thought their parents exercised too much control, and adolescents who thought their parents permitted too much freedom. Adolescents who wanted more freedom as well as adolescents who wanted more control, relied on their peers more than their parents for advice and were more willing to engage in deviant behaviour with their peers. The

researchers argue that optimal adolescent development requires changing the level of parental control (i.e. the level of autonomy granted) to fit the changing developmental needs of the adolescent.

Using the goodness of fit framework, this study explores whether Asian-American late adolescents preferred a different timetable of behaviour autonomy than their parents had allowed. Furthermore, there is an attempt to uncover whether the adolescents' degree of fit between the allowed and preferred timetable relates to late adolescent adjustment in terms of the quality of the parent-adolescent relationship, late adolescent internal distress, behaviour problems, self-esteem, and psychosocial maturity regarding work attitudes.

Hypotheses

- H1. Asian-American late adolescents, overall, would have liked to experience a different (e.g. earlier) timetable of autonomy than their parents allowed.
- H2. Knowledge of fit between the autonomy timetable that late adolescents wanted and what their parents had allowed is a better predictor of late adolescent adjustment than knowledge of the actual timetable the late adolescent experienced.
- H3. Asian-American late adolescents who experience a lack of fit with what their parents had allowed on issues of autonomy will report more negative adjustment than late adolescents who experienced a good fit with what their parents had allowed.

METHOD

Participants

All 99 participants were undergraduate students living in a large, Midwestern university town. The mean age was 19.8 years, and ranged from 17 to 24 years. There were 55 females. The participants were of Asian descent, with parents originating from either China, Taiwan, Japan, the Philippines, Thailand, Korea, or Vietnam. The majority (87.9%) were second generation (e.g. their parents immigrated to the US, and the participant was born in the US). The remaining were either first, or 1.5 generation (e.g. they were not born in the US but immigrated with their parents at a young age). Most (80.8%) grew up in the Midwest region of the US. The average length of time the participants lived in the US was 17.3 years (range = 7–24 years; SD = 3.43). The majority of participants (94.9%) grew up living with both parents.

The parents of the participants were a well-educated group: 79.8% of the fathers and 26.3% of the mothers were high school graduates, and of these, 48.5% of the fathers and 41.4% of the mothers were college graduates.

Procedure

Participants were recruited in several ways. The Coordinator for Asian Pacific Student Affairs of the Office of Minority Student Affairs (OMSA) arranged for the principal investigator to meet with the leaders of the Asian student groups. At these meetings, the purpose and nature of the study were explained. The student leaders were asked to assist the investigator in contacting potential participants, either by announcing the opportunity to participate in the study to members at a regular group meeting, or by providing a list of members to contact. Also, Asian students who attended psychology classes could sign up to participate in the study. Finally, participants were also recruited via e-mail. Information on the study was sent to over 1000 Asian students. Approximately 8% responded who met the criteria for this study.³

In order to obtain a wider range of participants, data were collected under three different survey conditions. Participants either completed the survey in a classroom on campus individually, in groups of 2–6, or at home, mailing back their responses. Preliminary analyses show that none of the study variables correlated significantly with survey condition. Participation in this study was voluntary, with no compensation for the majority of the participants. However, psychology students received class credits, and a lottery was held where three randomly chosen participants were paid on completion of data collection.

Measures

The following self-report questionnaires were administered.

Demographic information. Participants provided information on their age, sex, country and state of birth, generational status, length of residence in the US, and ethnic identity. In addition, participants provided information on their parents' country of birth and education level.

³ Overall, a greater percentage responded, but they were excluded from the final data analyses because they were too old (graduate students), were of mixed ethnicity (both parents were not Asian), were of Asian-Indian ethnicity (only Asians whose culture was based on Confucian philosophy were selected), were not Asian (but had last names such as 'Lee' or 'Wang'), or had just moved to the US to study within the last year.

Behavioural timetable of autonomy (Feldman & Rosenthal, 1990). This is a 19-item scale that assessed the timetable of expectations for autonomous behaviours by asking what adolescents actually experienced with their parents, and what adolescents *would have liked* to experience. For example, "At what age were you allowed to choose your own hairstyle even if your parents disapproved?" and "At what age would you have liked to choose your own hairstyle even if your parents disapproved?". Participants rated each item on a 5-point scale: 1 = before age 14; 2 = 14–15 years; 3 = 16–17 years; 4 = 18 years or older; 5 = never. Cronbach's alpha for the *allowed* timetable and *preferred* timetable were found to be .86, and .85, respectively.

Goodness of fit. This was measured in several ways. First, the discrepancy between adolescent expectations (*preferred timetable*) and the adolescent's ratings of parental expectations (*allowed timetable*) on the behavioural timetables were calculated. The score on each item from the preferred timetable scale was subtracted from the actual timetable scale. These difference scores were summed to produce a total fit index. The absolute values of the scores were used. A higher score (higher discrepancy) signified poorer fit.

The correlation between fit and adolescents' rating of parental expectations was .61 ($P < .001$). This is what one would expect, assuming that adolescents preferred to experience autonomous behaviours at an earlier age compared to when their parents allowed them to. The correlation between fit and adolescent expectations was .08—not significant.

The goodness of fit between adolescent expectations and what their parents allowed was also assessed by asking four questions (adapted from Eccles et al., 1991) to measure the actual level of parental control and the adolescent's desired level of control. The first index of fit consisted of the questions, "In general, how do you and your parents arrive at decisions that concern you?" and "In general, how do you think you and your parents *ought* to arrive at decisions concerning you?" Responses ranged from 1 = my parents tell me what to do; to 5 = my parents let me decide. The two items were significantly correlated ($r = .42, P < .001$). The second index of fit consisted of two questions, "How often do you take part in family decisions that concern you?" and "How often do you think you *ought* to take part in family decisions that concern you?" Respondents indicated the frequency on a scale ranging from 1 = never to 4 = always. These two items were significantly correlated ($r = .44, P < .001$). Discrepancy scores were calculated by subtracting the score from the item that indicated the actual level of parental control from the item that indicated the desired level of control. For example, if an adolescent answered that he/she never (1) takes part in family

decisions, yet thinks he/she *ought* to take part in family decisions sometimes (3), the discrepancy score equalled 2. The absolute values of the scores were used. A higher score represented a poorer fit.

Several areas of adolescent adjustment were measured.

The Psychosocial Maturity Inventory (Greenberger, Josselson, Knerr, & Knerr, 1974). This measure assessed how well the adolescent functions socially. One subscale consisting of 10 items was used—work orientation (sample item: “I believe in working only as hard as I have to”). Respondents rated how strongly they agreed or disagreed on a 4-point scale. A higher score represented a more mature response. Cronbach’s alpha for this sample was .70.

Connectedness (Stutman & Lich, 1984). This 11-item scale measured the extent to which the respondent felt close to and supported by his/her parents. Respondents indicated how strongly they agreed or disagreed with statements using a 4-point scale. Sample items are, “My parents and I feel like strangers to one another” and “When I am feeling bad I can count on my parents to remind me of my worth”. Cronbach’s alpha for this sample was .89.

The Misconduct Scale (adapted from Feldman & Rosenthal, 1991). This is an 8-item scale that measured the frequency (0 = never to 3 = often) of misconduct behaviours that the adolescent has engaged in. A sample item is, “Have you ever cheated on a test?” Cronbach’s alpha was .76 in this study.

Center for Epidemiological Studies–Depression (CES–D) (Radloff, 1977). This is a well-known 20-item scale that measured psychological depression. Respondents were asked to indicate how often (ranging from “rarely” to “most of the time”) they felt or behaved during the past week. Sample items are, “I was bothered by things that usually don’t bother me” and “I enjoyed life”. Cronbach’s alpha in this study was .90.

Familial Insecurity Scale (FIS) (Ainsworth & Ainsworth, 1958). Adolescents were asked to rate 12 items such as “I feel discouraged that it is so difficult to live up to my parents’ expectations”, on a 4-point scale ranging from “very false” to “very true”. Cronbach’s alpha was .81.

Self-Perception Profile for College Students (Neemann & Harter, 1986). This instrument measured the students’ perceptions of their level of competence in various domains. Of the original 13 subscales, 5 were used: (1) academic competence; (2) social ability; (3) close friendships; (4) intellectual ability; and (5) global self-worth. The first four subscales each have four items to assess the student’s perceived competence in that particular area. Global self-worth is assessed with six items. For example, to measure the student’s perceived competence in the academic arena, he/she responded to items such as, “Some students feel confident that they are

mastering their coursework, but other students do not feel so confident". The students must first decide which statement is most applicable to themselves, and then decide whether the statement is almost true or false or really true or false for them. The student's score for each subscale was calculated as a mean of the items from that subscale. Cronbach's alpha for the subscales used in this study are as follows: academic competence = .77; social ability = .82; close friendships = .84; intellectual ability = .76; and global self-worth = .85.

Grade Point Average (GPA). Respondents were asked to report their grade point average on a scale from 0.0–4.0.

There were some (3%) missing data. Missing data were estimated using multiple regression. Several predictor variables that significantly correlated with the variable with missing data were identified. Then, scores for each missing case were predicted using these predictor variables. These predicted scores replaced the missing information.

RESULTS

Discrimination analyses revealed that there were no significant sex differences found in the study variables. Therefore, for all analyses, male and female data were combined. The means, standard deviations, and ranges of the study variables are presented in Table 1.

Results for Hypothesis 1

Using a paired sample *t*-test it was found that, overall, these adolescents would have liked to engage in autonomous behaviours at an earlier age than their parents had allowed [$t(98) = 11.72, P < .0001$]. When each item of the autonomy timetable was analysed separately, it was found that out of the 19 items, late adolescents desired autonomy at an earlier age than their parents had allowed on a majority (14) of the items. Table 2 displays the results for each item.

This analysis gives an averaged, generalised picture in which individual differences are lost. Therefore, to explore whether there was variation in how Asian-American adolescents' desired autonomy differed from what their parents had allowed, discrepancy scores, indicating goodness of fit, were calculated. Using the absolute value of these scores, it was found that the scores ranged from 0 (there was no discrepancy between late adolescents and their perceived parent expectations) to 1.79. The mean was 0.52 (SD = 0.37), indicating some variation of fit in this sample. In other words, not all adolescents wanted more or less than what their parents had allowed regarding appropriate ages for certain autonomous behaviours—some fit well whereas others did not.

TABLE 1
Description of Study Variables

	<i>M</i>	<i>SD</i>	<i>Range</i>
Adjustment			
Depression	1.85	0.54	1.05–3.30
Emotional connectedness to parents	2.93	0.53	1.64–3.82
<i>Self-esteem:</i>			
Academic	2.51	0.66	1.00–4.00
Close friends	3.06	0.80	1.00–4.00
Intelligence	2.74	0.63	1.25–4.00
Social ability	2.99	0.75	1.25–4.00
Global	2.87	0.61	1.00–4.00
Grade point average (GPA)	2.92	0.47	1.80–3.90
Behaviour misconduct	0.78	0.42	0.00–2.13
Insecurity with parents	2.56	0.54	1.17–3.92
Work attitude	2.81	0.39	2.10–3.80
Indicators of Fit			
Autonomy timetable fit	0.52	0.37	0.00–1.79
How decisions are made in the family	0.62	0.75	0.00–3.00
How often are decisions made including the adolescent	0.82	0.87	0.00–4.00
Autonomy			
<i>Autonomy timetable:</i>			
Allowed	2.85	0.57	1.53–4.11
Would have liked	2.36	0.46	1.32–3.84

Results for Hypothesis 2

To address whether: (1) the allowed autonomy timetable experienced by the adolescents; or (2) the fit between what their parents had allowed and what the adolescents would have liked, was a better predictor of adolescent adjustment, two models were compared using LISREL. Both were two-factor models. Model I consisted of the Autonomy Timetable predicting Adolescent Adjustment. Model II consisted of Fit in Autonomy Expectations predicting Adolescent Adjustment. For both models, the covariance matrices (see Appendices A and B) were analysed using maximum likelihood estimation.

Model I. As there was only a single indicator for the latent variable of Autonomy Timetable, this path was set to 1.0. When this model was initially run, several of the goodness of fit indices indicated that the model did not fit well (goodness of fit index = 0.79, normed fit index = 0.71, comparative fit index = 0.77). Therefore, based on the modification

TABLE 2

Results for Paired Sample *t*-tests for Items on the Autonomy Timetable Scale: A Comparison of Adolescent Allowed and Preferred Timetables

<i>Item</i>		<i>Allowed</i>	<i>Preferred</i>	<i>t-value</i> (<i>df</i> = 98)
1. Choose your own hairstyle even if your parents disapprove	M (SD)	1.73 (1.02)	1.44 (0.76)	4.10*
2. Go to co-ed parties at night	M (SD)	2.73 (1.19)	2.09 (0.85)	7.24*
3. No longer have to tell your parents where you are going	M (SD)	4.16 (1.11)	3.25 (1.04)	9.54*
4. Prepare your own dinner when home alone	M (SD)	1.66 (0.95)	1.86 (1.24)	-2.10
5. Choose what clothes to buy even if your parents disapprove	M (SD)	2.18 (1.05)	1.65 (0.83)	6.56*
6. Watch as much TV as you want	M (SD)	2.12 (1.34)	1.51 (0.76)	5.10*
7. Go out on dates	M (SD)	3.29 (1.15)	2.42 (0.91)	9.26*
8. Be able to do things with friends rather than family when you prefer	M (SD)	2.95 (1.23)	2.20 (1.01)	6.76*
9. Smoke cigarettes	M (SD)	4.75 (0.80)	4.69 (0.68)	0.58
10. Stay home alone at night when your parents are out	M (SD)	1.68 (0.81)	1.62 (0.70)	1.06
11. Make your own doctor and dentist appointments	M (SD)	2.71 (1.09)	2.81 (1.02)	-1.32
12. Go on an overnight trip with friends of your own sex, without supervision	M (SD)	2.98 (1.19)	2.27 (0.95)	6.81*
13. Go on an overnight trip with male and female friends, without supervision	M (SD)	3.70 (1.01)	2.77 (0.98)	8.95*
14. Come home at night as late as you want	M (SD)	4.08 (0.96)	3.03 (0.80)	12.13*
15. Drink alcohol	M (SD)	4.29 (1.00)	3.91 (0.93)	3.61*
16. Be able to watch any TV, movie, or video you want	M (SD)	2.49 (1.22)	2.06 (1.00)	5.42*
17. Choose your own friends even if your parents disapprove	M (SD)	2.24 (1.48)	1.62 (0.96)	5.43*
18. Decide how to spend your money (allowance, wages, gifts, etc.)	M (SD)	2.12 (1.16)	1.71 (0.80)	5.02*
19. Stay home alone if you are sick	M (SD)	2.19 (1.38)	1.91 (1.13)	3.11

* $P < .05$ (this level was set with the Bonferonni adjustment $.05/19 = .003$).

indices, several error terms between the observed variables were allowed to be correlated to improve the model. The modified model demonstrated a moderate fit with the data. See Table 3 for a list of the goodness of fit indices. The *t*-values for the parameters of the measurement model for the latent factor of Adjustment were all significant. However, the path from Autonomy Timetable to Adolescent Adjustment was not significant (see Fig. 1).

Model II. When the model was run initially, several of the goodness of fit indices indicated that the model did not fit well (goodness of fit index = 0.79, normed fit index = 0.71, comparative fit index = 0.79). An examination of the modification indices indicated that by allowing a number of error terms to be correlated between the observed variables, the model could be improved. The modified model demonstrated good fit with the data. Table 3 shows the goodness of fit indices for this model. The *t*-values for the parameters of the measurement model and for the structural model were all significant (see Fig. 2).

A comparison of the models shows that model II fits the data better than model I. That is, knowledge of the fit between what autonomy timetable parents had allowed and what the adolescent would have liked, was a better predictor of adjustment than simply knowing the timetable of autonomy that the adolescent was allowed to experience.

Results for Hypothesis 3

Because the dependent variables were correlated (see Table 4), a MANOVA was used to test Hypothesis 3—that adolescents who experienced a good fit with what their parents had allowed regarding autonomy would demonstrate more positive adjustment compared to those who experienced a poor fit. Adolescents were divided into two groups for the independent variable—those who experienced good fit and those who

TABLE 3
LISREL Goodness of Fit Indices: Models I and II

	<i>Model I</i>	<i>Model II</i>
Chi-square	87.12, <i>df</i> = 40 (<i>P</i> = .00)	64.90, <i>df</i> = 55 (<i>P</i> = .17)
Goodness of fit index	0.88	0.91
Normed fit index	0.82	0.89
Comparative fit index	0.89	0.98
Critical <i>N</i>	72.64	125.26
Standardised root mean square residual	0.09	0.06

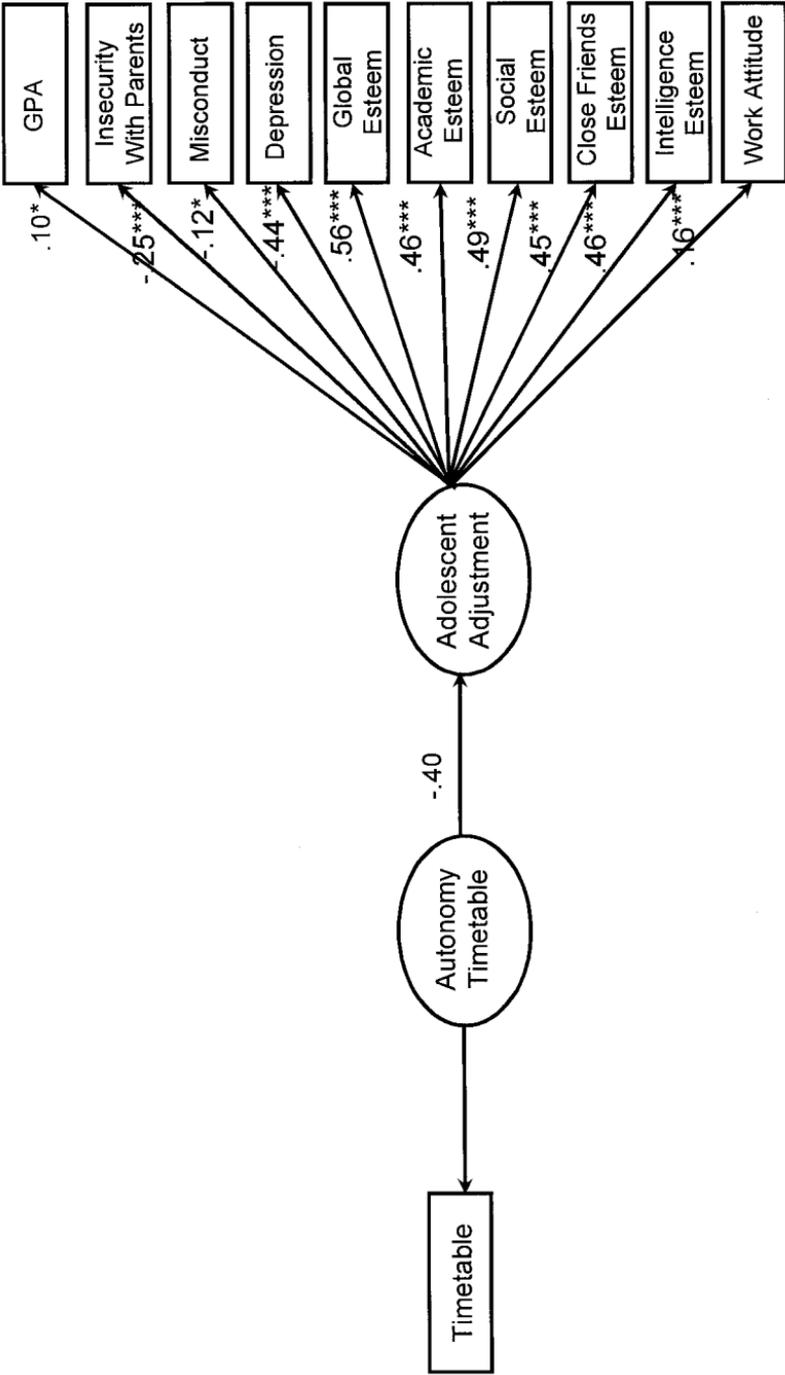


FIG. 1. Model I: Allowed autonomy timetable predicting late adolescent adjustment. (* $P < .05$; ** $P < .01$; *** $P < .001$.)

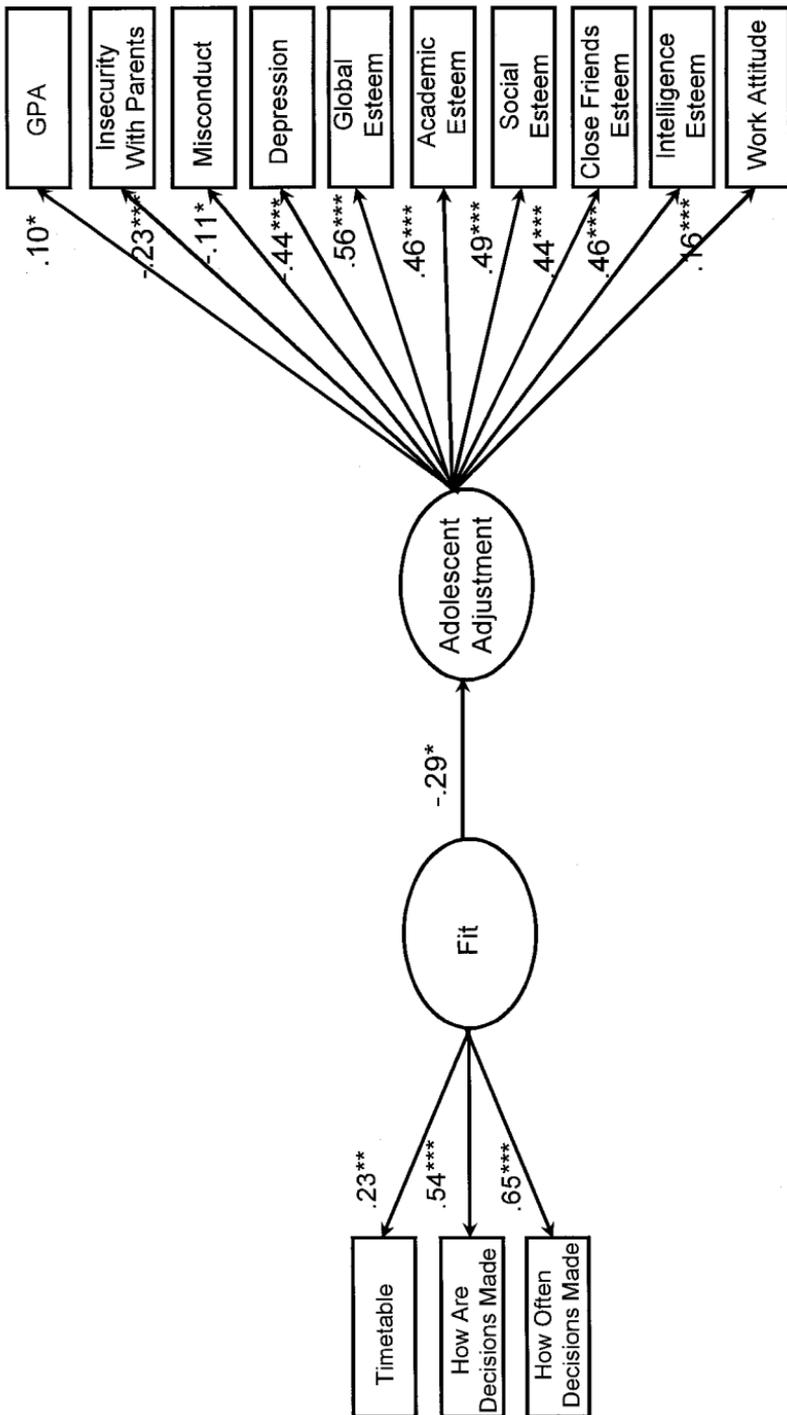


FIG. 2. Model II: Fit in autonomy expectations predicting late adolescent adjustment. (* $P < .05$; ** $P < .01$; *** $P < .001$.)

TABLE 4
Correlations between the Dependent Variables

	1	2	3	4	5	6	7	8	9	10	11
1. Depression	1.00										
2. Connectedness to parents	-.18	1.00									
3. Academic self-esteem	-.54***	.16	1.00								
4. Close friends self-esteem	-.52***	.26*	.33**	1.00							
5. Global self-esteem	-.73***	.18	.66***	.56***	1.00						
6. Intelligence self-esteem	-.57***	.17	.71***	.32**	.70***	1.00					
7. Social self-esteem	-.59***	.21*	.37***	.64***	.65***	.35***	1.00				
8. Misconduct	.30**	-.10	-.18**	-.02	-.05	-.18	-.07	1.00			
9. Insecurity with parents	.38***	-.55***	-.41***	-.36***	-.38***	-.35***	-.25*	.04	1.00		
10. Work attitude	-.36***	.16	.41***	.21	.31**	.38***	.25*	-.23*	-.26**	1.00	
11. Grade Point Average (GPA)	-.16	.15	.37***	-.11	.19	.23*	.05	-.10	-.04	.21*	1.00

* $P < .05$, ** $P < .01$, *** $P < .001$.

TABLE 5
MANOVA Results for Fit in Autonomy Timetable with Late Adolescent Adjustment

<i>F-tests with (1,96) df</i>	Fit in <i>Timetable of Autonomy Behaviours (F)</i>
Depression	5.60*
Emotional connectedness to parents	11.12**
<i>Self-esteem:</i>	
Academic	4.00*
Close friends	4.97*
Intelligence	3.09
Social ability	6.31*
Global	3.37
Grade point average (GPA)	0.00
Behaviour misconduct	8.33**
Insecurity with parents	25.62***
Work attitude	4.59*
Wilks' lambda	0.67
<i>F-value</i>	4.13**
<i>Eta</i> ²	0.34

* $P < .05$; ** $P < .01$; *** $P < .001$.

TABLE 6
MANOVA Results for Fit in How, and How Often, Decisions Are Made in the Family with Late Adolescent Adjustment

<i>F-tests with (1,96) df</i>	Fit in <i>How Decisions are Made in Family (F)</i>	Fit in <i>How Often Decisions Made in Family (F)</i>
Depression	5.49*	3.10
Connectedness to parents	19.00***	28.62***
<i>Self-esteem:</i>		
Academic	2.94	1.93
Close friends	3.59	3.24
Intelligence	4.70*	1.54
Social ability	1.51	0.00
Global	4.25*	1.84
Grade point average (GPA)	0.06	0.77
Behaviour misconduct	1.10	0.06
Insecurity with parents	22.89***	27.54***
Work attitude	0.36	0.00
Wilks' lambda	0.74	0.64
<i>F-value</i>	2.79**	4.48***
<i>Eta</i> ²	0.26	0.36

* $P < .05$; ** $P < .01$; *** $P < .001$.

experienced a poor fit in timetable expectations with their parents.⁴ Based on Wilks' criterion, it was found that the combined dependent variables were significantly and moderately related to fit group. As hypothesised, adolescents who fit well with their perceived parental expectations of autonomy reported closer relationships with their parents, more appropriate work attitudes, higher levels of self-esteem in three areas (e.g. academic, close friends, and social ability), and lower levels of depression, behaviour misconduct, and insecurity with parents, than those who did not fit well (see Table 5).

In addition to the fit in timetable expectations, two other goodness of fit indicators (by Eccles et al., 1991) were analysed: (1) *how* decisions were made in the family that concerned the adolescent compared to how the adolescent *would have liked* these decisions to be made; and (2) *how often* decisions were made that concerned the adolescent compared to how often the adolescent *would have liked* these decisions to be made. A higher score indicated there was a greater discrepancy between what the adolescent wanted and what his/her parent allowed.

Adolescents were again divided into two groups for the independent variable—those who experienced good fit and those who experienced poor fit. The MANOVA results (Table 6) show similar findings to the fit in the timetable of autonomy analyses, namely, that those who fit well with what their parents had allowed fared better than those who did not. More specifically, poor fit was linked to greater depression, more insecurity with parents, less connectedness to parents, and lower self-esteem, again supporting the goodness of fit framework. In sum, individuals who fit into their perceived contextual demands seem to be more likely to enjoy positive functioning compared to their poor fitting counterparts.

DISCUSSION

The goal of this study was to investigate the goodness of fit in the timetables of autonomy between Asian-American late adolescents and

⁴ Originally, it was intended to examine whether there was a difference between those who wanted more autonomy than their parents allowed, those who wanted less (two types of poor fit), and those who were satisfied (good fit) with the amount of autonomy they were granted. The three fit indices of: (1) autonomy timetable; (2) how decisions were made in the family; and (3) how often decisions were made that included the adolescent, were each split into those three groups. However, a MANOVA with the three fit indices predicting 11 adjustment variables, showed no significant results. One reason for this may be the small size of some of the groups. For example, there were very few adolescents who wanted *less* autonomy than their parents allowed. Therefore, in further analyses the poor fit groups were combined and compared against those with good fit.

their parents. Given the significance and impact of context for development (Lerner, 1993), autonomy was examined in relation to perceived parental demands. Additionally, this study examined how the level of fit Asian-American adolescents experienced in the family context corresponded to late adolescent functioning in several areas such as relationships with parents, depression, and self-esteem.

It was found that for almost all of the autonomy behaviours, adolescents, on average, wanted to engage in these behaviours at an earlier age than their parents allowed. It is possible that parents in this sample held more Asian values than their adolescents, and, perhaps, emphasised collectivistic rather than individualistic behaviours. The Asian-American adolescents, on the other hand, may have acquired the more individualistic values of the predominant Western culture, and, consequently, desired more autonomy than their parents were willing to allow. However, one cannot say whether differences in expectations are unique to this group. Perhaps these differences would be true for any parent-adolescent group. For example, a recent study involving Dutch youth found that parents held later expectations for autonomy timetables compared to their adolescents (Deković, Noom, & Meeus, 1997). Nonetheless, in Asian families, perhaps the lack of fit in expectations may be even more pronounced. Only by doing a comparison study could one begin to answer this question adequately.

The averaged scores do not give the full picture. To account for the individual differences, goodness of fit scores were calculated. These fit scores revealed that not all adolescents experienced poor fit with what their parents had allowed. Some matched their perceived parental expectations and others did not. In other words, even though cultural variations exist within immigrant families, there are some families where the values and beliefs that family members hold remain consistent across generations.

This study supported the use of the goodness of fit model as a means of understanding late adolescent functioning. The first indicator of fit, fit in autonomy timetable expectations, successfully predicted depression, several areas of self-esteem, the quality of the parent-adolescent relationship, behaviour misconduct, and work attitude. Hypotheses based on the goodness of fit model were supported. Namely, the knowledge of fit in autonomy timetables provided more information regarding adolescent adjustment compared to a simple examination of the adolescent's actual timetable. That is, taking into account both what the parents had allowed and what the adolescents desired proved to be more useful in understanding adolescent functioning.

The second indicator of fit—how decisions are made in the family that concern the adolescent—also predicted adolescent adjustment. This was a better predictor compared to the third indicator of fit—how often are

decisions made in the family that include the adolescent. This is not surprising in the light of the goodness of fit framework. Some adolescents do not care if they are not included in the family decision-making process, even if the decision concerns them. Instead, they are content allowing their parents to take control. Consequently, it would not matter to the adolescent how often he/she was included in the decision making. The findings suggest that the process of decision making (e.g. *how* decisions are made) is more important to adolescents than the number of instances that they are included. Moreover, consistent with the goodness of fit framework, poor fit was associated with negative outcomes whereas good fit was associated with positive outcomes.

Grade point average (GPA) was not significantly related to any of the fit indices. Two reasons could explain this. First, GPA may be the least reliably measured adjustment variable for this sample. Some of the students who participated were first year students in their first semester (about 20%). Thus, they had not yet received an official grade report and, consequently, had to estimate their current GPA. Second, it has been found in studies on parenting (e.g. authoritative parenting in various ecological niches by Steinberg, Mounts, Lamborn, & Dornbusch, 1991) that in Asian samples, parenting did not predict their adolescents' academic success. In this study, parenting was not specifically measured, nonetheless, aspects of parenting were touched upon. Steinberg et al. (1991) propose that other factors besides parenting, such as the type of peers the adolescent affiliates with, predict better academic success for Asian students. These two reasons could explain the nonexistent relationship between fit and GPA.

With the exception of GPA, the dependent variables were moderately correlated with one another, suggesting that perhaps these measures reflect an underlying distress factor of the late adolescent. This overall distress could be linked to the tendency for the adolescent to perceive his/her parents as having autonomy expectations that conflict with his/her own expectations. Because the data are correlational, however, we cannot specifically test whether it is poor fit that is driving adolescents to more negative adjustment or vice versa. Most likely, both processes are in play.

Another explanation for the relationship between poor fit with negative adolescent outcomes may lie with the parents themselves. Parenting styles that differ from the mainstream has previously been thought to be culturally deviant or deficient, affecting children negatively (see Coll et al., 1996, for a review). From this perspective, it may be argued that Asian parents who do not allow their adolescents autonomy until much later ages deviate from mainstream parents. It may be this kind of "deviant" parenting that launches the adolescent to a lower level of functioning. However, labelling non-mainstream parenting as potentially "deviant" is

problematic. Chao (1994) has argued that parenting and its influences must be understood in its cultural context. In her work, she has found that parenting that typically is thought to be detrimental to adolescent outcomes in the U.S. (e.g. the authoritarian parenting style) may not be detrimental for adolescents from other cultures, such as Chinese. The goodness of fit framework that takes into account individual adolescents' expectations and the contextual realities that their parents form recognises that there is variation from family to family. Therefore, it is not necessarily because of some general "problem" in the type of parenting but rather these variations in matching or mismatching expectations that, we believe, best explains why some Asian adolescents experience poorer adjustment than others.

In sum, the level of fit was a useful predictor of several aspects of late adolescent adjustment, more so than simply knowing what the adolescent experienced without taking into consideration what they would have liked to experience. This suggests that instead of generalising about the optimal level of autonomy parents should grant their adolescents, the fit between how much autonomy late adolescents desire and how much their parents are willing to allow should be considered. Depending on the developmental stage of the adolescent, optimal levels of autonomy from and connectedness to parents will change. Parents then have the responsibility to respond sensitively to the changing needs of the adolescent by allowing more freedom at certain times and offering more support at others (Eccles et al., 1991).

Each adolescent differs cognitively, socially, and biologically, and each may demand different timetables and degrees of autonomy that are developmentally appropriate and optimal. Each adolescent also has unique parents with unique expectations that result in differences in expectation fit for each adolescent-parent dyad. Researchers who adopt the goodness of fit model take these individual differences into account.

Limitations and Implications for Future Research

There were several limitations to this study. First, the sample consisted of various Asian groups representing seven Asian countries. Although these groups share commonalities (e.g. geography, a collectivistic orientation, Confucian philosophy), each is distinguished by its specific history, customs, and language. By combining and analysing all the groups as a whole, unique group differences are lost. Nevertheless, the sample size for each group was not sufficient to allow for between-group comparisons. Future studies should examine these specific Asian groups separately to discover whether autonomy development proceeds in a similar manner for each group. Nonetheless, this study is still useful in understanding autonomy development for Asian-American late adolescents in general.

Second, the sample was selective in the sense that participants were college students with well-educated parents who had been settled in the US for a relatively long period of time. Unfortunately, detailed information of this kind regarding the nonparticipants of this study was not available. Consequently, generalising the findings to Asian-American late adolescents who are not in the university track, whose parents are not well educated, and who have lived in the US for a short amount of time, is not warranted.

Another limitation was that all measures were self-report, including perceived parental expectations of the timetable of autonomy. There is no way to confirm whether parents would have given the same ratings as adolescents rated them to be. However, it has been argued that gathering information from adolescents on how they subjectively perceive their family experiences is not inherently inferior to "objective" measures (Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994). The findings of this study can be useful if one assumes that adolescents could remember accurately when they were allowed to engage in certain autonomous behaviours.

It would have been interesting to examine more closely how the valence of the goodness of fit score relates to adolescent adjustment. As stated in the literature review, different types of "poor fit" (e.g. exceeding parental expectations vs. falling below parental expectations) have been linked to different adolescent outcomes (Juang et al., 1995; Lerner et al., 1985), as well as to similar outcomes (Eccles et al., 1991). Due to sample size limitations in this study, comparing how these different kinds of poor fit related to adolescent well-being was not possible. More research in this area to clarify the contrasting research findings regarding poor fit is needed.

The timing of mismatching expectations also merits further investigation (Greenberger & Chen, 1996). In other words, *when* does a mismatch between adolescent and parent expectations begin? Greenberger and Chen (1996) contend that this mismatch may occur in late adolescence when conflicts over autonomy arise. These researchers compared Asian-American to European-American early and late adolescents (college students) on depressed mood and found no difference when comparing *early* adolescent Asian-Americans to European-Americans. By *late* adolescence, however, Asian-Americans reported having significantly more depressed mood than European-Americans.

Greenberger and Chen (1996) propose that the difference in depressed mood emerging in late adolescence may signify difficulties in attaining autonomy in the home. The nature of the conflicts involved disputes over the late adolescent's "habits and routines, choice of friends and the activities engaged with friends, and privacy with respect to telephone calls and letters" (p. 712), all aspects of autonomy. These researchers argue that

“late adolescent efforts at establishing autonomy are delayed in Asian-American families perhaps because of their later expected age of independence in various domains. These efforts are less supported in Asian-American families because of cultural expectations for respect and obedience. At late adolescence, Asian-Americans in our study are more involved in a struggle for control than are European-Americans” (Greenberger & Chen, 1996, pp. 714-715).

Eccles and her colleagues (1991), on the other hand, assert that a mismatch in expectations may begin in early adolescence. They reason that, at this time, early adolescents gain increasing opportunities for unsupervised interactions with their peers. These peer relationships expose the adolescent to relationships that are equal in power and authority. As a result, this may lead the adolescent to increasingly expect the same equality at home. Thus, the early adolescent may push for more autonomy than their parents are ready to allow at this developmental stage. Only longitudinal research can answer this question of the timing of mismatching expectations.

Another avenue for future research would involve an investigation into the timing of puberty and its association with the allowance of autonomous behaviours. The adolescent's rate of maturation may affect how people react to him or her (Tanner, 1991). For instance, adolescents who experience the onset of puberty at an earlier age may be allowed to engage in autonomous behaviours earlier compared to the adolescent who remains physically and biologically more immature for a longer period of time, simply because the early maturing adolescent looks older. One can then ask, who are the adolescents who experience good fit—those who matured earlier and were allowed more autonomy at an earlier age? Or, conversely, would we find that late maturing adolescents are more likely to experience poor fit because they were not allowed to engage in autonomous behaviours until a much later age than they would have liked? Although maturational timing was not found to significantly relate to autonomy timetables in adolescent immigrants from Eastern Europe (Schmitt-Rodermund & Silbereisen, 1996), future research is needed to confirm these findings in other populations, such as Asian-Americans.

CONCLUSION

All adolescents deal with issues of autonomy. However, the timing, difficulty, and resulting outcomes of this task will vary for each adolescent, depending on their individual characteristics, parental expectations, and cultural expectations. For some adolescents there will be an easy transition to independence, whereas for others it will be a hard-fought struggle.

The findings of this study have underscored the importance of individual-environment fit. Rather than generalising about the optimal timing or degree of autonomy adolescents should be granted, each adolescent must be assessed in relation to his or her context. The goodness of fit model highlights the significance of the interplay between adolescents and their perceived environmental demands. Future research should continue to examine how adolescents fit into familial expectations of autonomy. In doing so, we will gain a fuller understanding of their journey towards autonomy into the larger society.

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APPENDIX A
Covariance matrix for model I

	<i>GPA</i>	<i>Parinsec</i>	<i>Misconduct</i>	<i>CES-D</i>	<i>Global</i>	<i>Academic</i>	<i>Social</i>	<i>Friend</i>	<i>Intelligence</i>	<i>Work</i>	<i>Autotime</i>
<i>GPA</i>	.222										
Parent insecurity	-.010	.296									
Misconduct	-.020	.010	.172								
<i>CES-D</i>	-.040	.112	.067	.292							
Global esteem	.054	-.125	-.013	-.239	.372						
Academic esteem	.116	-.146	-.048	-.192	.265	.432					
Social esteem	.017	-.102	-.021	-.241	.298	.184	.566				
Friend esteem	-.042	-.158	-.006	-.222	.267	.172	.382	.633			
Intelligence esteem	.069	-.120	-.046	-.192	.268	.291	.164	.162	.391		
Work attitude	.039	-.055	-.037	-.075	.073	.105	.071	.064	.091	.148	
Autonomy Timetable	.000	.080	.031	.022	-.009	.000	-.015	-.028	-.017	-.009	-.102

APPENDIX B
Covariance matrix for model II

	<i>GPA</i>	<i>Parinsec</i>	<i>Misconduct</i>	<i>CES-D</i>	<i>Global</i>	<i>Academic</i>	<i>Social</i>	<i>Friend</i>	<i>Intelligence</i>	<i>Work</i>	<i>Autofit</i>	<i>Howfit</i>	<i>Offenfit</i>
<i>GPA</i>	.222												
Parent insecurity	-.010	.296											
Misconduct	-.020	.010	.172										
<i>CES-D</i>	-.040	.112	.067	.292									
Global esteem	.054	-.125	-.013	-.239	.372								
Academic esteem	.116	-.146	-.048	-.192	.265	.432							
Social esteem	.017	-.102	-.021	-.241	.298	.184	.566						
Friend esteem	-.042	-.158	-.006	-.222	.267	.172	.382	.633					
Intelligence esteem	.069	-.120	-.046	-.192	.268	.291	.164	.162	.391				
Work attitude	.039	-.055	-.037	-.075	.073	.105	.071	.064	.091	.148			
Autonomy fit	.006	.103	.014	.014	-.037	-.036	-.043	-.056	-.042	-.020	.134		
How fit	-.015	.191	.044	.097	-.077	-.065	-.060	-.127	-.082	-.001	.123	.565	
How often fit	-.032	.234	-.009	.067	-.110	-.086	-.042	-.153	-.133	-.009	.152	.350	.757

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