# Relationship of Selected Factors to Traditional-Age Undergraduate Women's Development of Autonomy

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## Abstract:

The independent contribution of interpersonal relationships, parental attachment, and racial/ethnic identity to traditional-age undergraduate women's autonomy development, removing the effect of biographical correlates, is explored. Differences by race/ethnicity and by residence status in the relationship of factors to autonomy are investigated.

## Article:

Attainment of autonomy has long been considered a central developmental task of the college years (Chickering, 1969; Chickering & Reisser, 1993; Erikson, 1963, 1964, 1968) and a goal of higher education (Boyer, 1987; Pascarella & Terenzini, 1991). Various theorists have focused on the theme of relationships as central to describing women's lives and women's development (Chodorow, 1978; Dinnerstein, 1976; Gilligan, 1982; Miller, 1986). They have criticized most psychological theories for emphasizing separation and autonomy at the expense of the importance of relationships and connection. As a result, college women's development presents a puzzle for scholars of student development.

The most widely accepted model of college students' psychosocial development is Chickering's (1969), which followed the lead of Erikson's (1963, 1964, 1968) in its placement of the developmental task of seeking autonomy before that of forming relationships. Although many researchers have explored the development of autonomy and interpersonal relationships in the college years, most have compared women's development to men's. Other researchers (Straub, 1987; Straub & Rodgers, 1986; Taub & McEwen, 1991) have raised questions about Chickering's model. They have suggested that for women interpersonal relationships are a relatively constant theme throughout the college years, whereas autonomy development, rather than being a primary developmental concern during the first 2 college years, occurs relatively late in the college years. Straub (1987) found that college women's descriptions of their development of autonomy often did not fit Chickering's descriptions of that vector; in fact, descriptions by many of the women' Straub studied had more in common with Chickering's description of the vector of freeing interpersonal relationships.

Greeley and Tinsley (1988) explored another aspect of these themes in an investigation of gender differences in and predictors of the developmental status of autonomy and intimacy in college students. Greeley and Tinsley found that for both men and women the best predictor of autonomy was intimacy, and vice versa, suggesting a strong relationship between autonomy and interpersonal relationships.

In response to such research Chickering, in the revised *Education and Identity* (Chickering & Reisser, 1993), moved the vector of interpersonal relationships "to an earlier place in the sequence" (p. 24), that is, before the establishing identity vector. In addition, the name of the vector has been changed from "freeing interpersonal relationships" to "developing mature interpersonal relationships." Further, the autonomy vector has been

renamed "moving through autonomy to interdependence" to place greater emphasis on the aspect of interdependence.

The literature has suggested that a number of factors may be related to the development of autonomy in college women. Although the centrality of relationships in women's development has been well documented by developmental theorists (Chodorow, 1978; Dinnerstein, 1976; Gilligan, 1982, 1988; Miller, 1986), only Greeley and Tinsley (1988) have explored the relationship of interpersonal relationships to autonomy in college students. Both theory and research (Ainsworth, Blehar, Walters, & Wally, 1978; Bowlby, 1969, 1988; Henton, Lamke, Murphy, & Haynes, 1980) have suggested that parental attachment and family support may provide the necessary base for autonomy development in college students, whereas Chickering's (1969) model describes breaking away from parents as the necessary first step for autonomy development. Research also has revealed relationships between racial/ethnic identity and Chickering's vectors of autonomy and interpersonal relationships (Taub & McEwen, 1992).

In the examination of traditional-age undergraduate women's development of autonomy, the role that relationships, both with peers and with parents, play in women's development of autonomy emerged as a significant issue in the current study. The contributions of several biographical correlates (age, class year, race/ethnicity, and residence status), interpersonal relationships, parental attachment, and racial/ethnic identity were explored.

The research questions were: (a) What is the relationship between autonomy and interpersonal relationships, parental attachment, racial/ethnic identity, and the biographical correlates of class year, age, race/ethnicity, and residence status in traditional-age undergraduate women? and (b) Is the relationship between the predictors and autonomy different by either race/ethnicity or residence status?

## METHOD

### *Participants*

Participants for this study were traditional-age (16 to 25 years) undergraduate women enrolled at a large, public, predominantly White, mid-Atlantic university. A stratified random sample of 628 undergraduate women was obtained; stratification was by class year, residence status (campus resident and commuter), and race/ethnicity (African American, Asian, Latina, and White). Completed instruments were received from 331 women, and four packets were returned as undeliverable for a 53.3% response rate. Six women who were not traditional-age students, were dropped from the analyses.

Responses from a total sample of 325 participants (ages 16 to 25) were analyzed. Of this group, 61 (18.8%) were first-year students, 75 (23.1%) sophomores, 91 (28.0%) juniors, and 98 (30.2%) seniors. Seventy-three (22.5%) were African American, 87 (26.8%) were Asian or Asian American, 62 (19.1%) were Latina, 88 (27.1%) were White, and 14 (4.3%) identified themselves as being of mixed race/ethnicity; the race of one respondent fit none of these categories. From the total sample, 189 (58.2%) were campus residents, and 136 (41.8%) were commuters. The mean age of respondents was 20.06 ($SD$ = 1.65).

### *Procedure*

Packets containing a cover letter, instruments, a reply postcard, and a return envelope were mailed to the random sample. Reminder postcards were mailed 1 week and 2 weeks later, and follow-up telephone calls were made to non-respondents 4 weeks after the initial mailing.

### *Instrumentation*

*Iowa Developing Autonomy Inventory*. Autonomy was measured using the Iowa Developing Autonomy Inventory (IDAI) (Jackson & Hood, 1985). Item responses were obtained using a 5-point Liken scale ranging from 1 (*never characteristic of me*) to 5 (*almost always characteristic of me*). The IDAI comprises six 15-item sub-scales measuring the three aspects of autonomy as defined by Chickering (1969): emotional independence (Emotional Independence-Parents and Emotional Independence-Peers), instrumental independence (Mobility,

Time Management, and Money Management), and interdependence (Interdependence) (Hood & Jackson, 1986). Hood and Jackson (1986) reported internal consistency reliability coefficients of .94 for the entire instrument and from .77 to .88 for the subscales ($N$ = 84). In the current study an internal consistency coefficient (alpha) of .92 was obtained for the entire instrument, and coefficients of .72 to .85 were obtained for the subscales. Validity evidence for this inventory is mixed (White & Hood, 1989).

*Mines-Jensen Interpersonal Relationships Inventory*. Development in interpersonal relationships was measured using the Mines-Jensen Interpersonal Relationships Inventory (MJIRI) (Mines, 1977). The MJIRI consists of 42 items measuring development along the freeing interpersonal relationships vector as described by Chickering (1969) in four content areas: peers, adults, friends, and significant others (Mines, 1978). Item responses were obtained using a 4-point Likert scale, ranging from 1 (*strongly agree*) to 4 (*strongly disagree*). The inventory is made up of two scales, Tolerance (20 items) and Quality of Relationships (22 items) (Hood & Mines, 1986). Hood and Mines reported internal consistency reliability coefficients of .65 for Tolerance and .68 for Quality of Relationships ($N$ = 168); White and Hood (1989) reported reliability coefficients of .71 for Tolerance and .79 for Quality of Relationships ($N$ = 255). In the current study internal consistency reliability coefficients (alpha) of .67 for Tolerance and .77 for Quality of Relationships were obtained.

Validity for the MJIRI is supported by significant relationships between Quality of Relationships and involvement in campus organizations, recreational activities, and work experiences and between religious beliefs and Tolerance ($N$ = 82) (Hood & Mines, 1986). In addition, Winston and Miller (1987) found that the Mature Interpersonal Relationships task of the Student Developmental Task and Lifestyle Inventory was significantly correlated with the MJIRI (.37), as were the subtasks of Tolerance (.27), Emotional Autonomy (.33), and Peer Relationships (.31) ($N$ = 49).

*Parental Attachment Questionnaire*. Parental attachment was measured using the Parental Attachment Questionnaire (PAQ) (Kenny, 1987a), designed to assess attachment in adolescents and young adults (Ainsworth et al., 1978). The PAQ consists of 55 items, which make up three scales: Affective Quality of Attachment, Parental Fostering of Autonomy, and Parental Role in Providing Emotional Support. Item responses were obtained using a 5-point Likert scale, ranging from 1 (*not at all*) to 5 (*very much*). The PAQ asks for a single rating for both parents; pilot studies indicated no significant differences between ratings assigned to mothers and those assigned to fathers (Kenny, 1987a).

Two-week test-retest reliability was .92 for the entire PAQ and ranged from .82 to .91 for the subscales. Internal consistency reliability coefficients for the subscales were .96 for Affective Quality of Attachment, .88 for Parental Fostering of Autonomy, and .88 for Parental Role in Providing Emotional Support (Kenny, 1987a). In the current study, internal consistency reliability coefficients (alpha) were .95 for Affective Quality of Relationship, .88 for Parental Fostering of Autonomy, and .82 for Parental Role in Providing Emotional Support. Validity evidence for the PAQ has been reported by Kenny and Donaldson (1991) in a comparison of the PAQ to the Family Environment Scales (FES) (Moos, 1985).

*Multigroup Ethnic Identity Measure*. Racial/ethnic identity was measured using the Multigroup Ethnic Identity Measure (MEIM) (Phinney, 1992). The MEIM consists of 20 items and comprises two scales: Ethnic Identity and Other-Group Orientation. Item responses were obtained using a 4-point Likert scale ranging from 4 (*strongly agree*) to 1 (*strongly disagree*). Scores were obtained by reversing the negative items, summing across items, and dividing by the number of items to obtain the mean.

Phinney (1992) reported internal consistency reliability coefficients with a college sample ($N$ = 136) of .90 for Ethnic Identity and .74 for Other-Group Orientation. Internal consistency reliability coefficients (alpha) for the MEIM scales for the current study were found to be .92 for Ethnic Identity and .82 for the Other-Group Orientation. Evidence for criterion group validity has been reported by Phinney in a comparison of the scores of college students and high school students on the identity achievement subscale in which college students obtained higher scores.

Unlike other instruments designed to measure racial/ethnic identity, the MEIM is appropriate with all racial/ethnic groups. According to Phinney (1992), "there is evidence that a single model describes the process of ethnic identity formation for diverse groups" (p. 158).

TABLE 1

Hierarchical Regression Analysis in Predicting Autonomy for Total Sample ($N = 325$)

| Predictor | *df* | $R^2$ Change | *F* Change | *p* value |
|---|---|---|---|---|
| Tolerance | 1 | 0.0003 | 0.211 | .646 |
| Quality of Relationships | 1 | 0.1761 | 121.184 | .000*** |
| Affective Quality of Relationship | 1 | 0.0011 | 0.772 | .380 |
| Parents Facilitate Autonomy | 1 | 0.0006 | 0.415 | .520 |
| Parental Role in Emotional Support | 1 | 0.0651 | 44.783 | .000*** |
| Ethnic Identity | 1 | 0.0000 | 0.011 | .916 |
| Other-Group Orientation | 1 | 0.0253 | 17.448 | .000*** |
| Residual | 307 | Mean Square = 554.56 | | |

*** $p < .0001$.

**RESULTS**

The relationship between developing autonomy and the predictors was explored using hierarchical regression analysis. The biographical correlates (age, class year, race/ethnicity, and residence status) were entered on the first step to remove their influence on the other factors. Each of the other factors was entered last to determine the independent contribution of each factor. The entire regression equation explained 55.40% of the variance, $F(17) = 22.43$, $p < .0001$, in autonomy as measured by the IDAI total score. The biographical correlates explained 8.64% of the variance in autonomy scores, $F(10) = 2.97$, $p < .001$, when entered on the first step. Table 1 presents the results of the hierarchical regression analysis, displayed as suggested by Schafer (1992).

Three factors—the Quality of Relationships scale of the MJIRI, the Parental Role in Providing Emotional Support scale of the FAQ, and the Other-Group Orientation scale of the MEIM—made significant independent contributions to the variance in autonomy scores above the contributions of the biographical correlates and the other factors. The relationship between autonomy and Parental Role in Providing Emotional Support was an inverse one.

Hierarchical regressions were also performed, with each set of biographical correlates entered last. None of the biographical correlates made a significant independent contribution to autonomy. Separate hierarchical regression analyses were performed for each of the four major racial/ethnic groups represented in the study: African Americans, Asian Americans, Latinas, and Whites. Separate hierarchical regression analyses were also performed for residents and commuters and the results appear in Tables 2 and 3.

For African American women the full model explained 59.15% of the variance, $F(13) = 6.57$, $p < .0001$, for Asian Americans 67.26% of the variance, $F(13) = 11.54$, $p < .00001$, for Latinas 61.77% of the variance, $F(13) = 5.97$, $p < 0001$, and for White women 47.29% of the variance, $F(13) = 5,11$, $p < .0001$).

As shown in Table 2, Quality of Relationships and Parental Role in Providing Emotional Support made significant independent contributions to the variance in autonomy scores for African Americans, Asian Americans, Whites, and Latins, although the percentage of explanation varied among the subgroups. In each case, as for the entire sample, the relationship between autonomy and Parental Role in Providing Emotional

Support was an inverse one. In addition, for Latinas, but for none of the other racial/ethnic groups, Other-Group Orientation made a significant independent contribution to the variance in autonomy.

TABLE 2

Separate Regressions for Racial/Ethnic Groups on Autonomy ($n = 310$)

| Variable | *df* | $R^2$ Change | *F* Change | *p* value |
|---|---|---|---|---|
| *African Americans* ($n = 73$) | | | | |
| Tolerance | 1 | .0002 | 0.023 | .881 |
| Quality of Relationships | 1 | .1501 | 21.675 | .000*** |
| Affective Quality of Relationship | 1 | .0015 | 0.212 | .647 |
| Parents Facilitate Autonomy | 1 | .0011 | 0.156 | .694 |
| Parents Role in Emotional Support | 1 | .0422 | 6.090 | .017* |
| Ethnic Identity | 1 | .0154 | 2.229 | .141 |
| Other-Group Orientation | 1 | .0192 | 2.767 | .102 |
| Residual | 59 | Mean Square = 509.75 | | |
| *Asian Americans* ($n = 87$) | | | | |
| Tolerance | 1 | .0015 | 0.324 | .571 |
| Quality of Relationships | 1 | .1835 | 40.917 | .000*** |
| Affective Quality of Relationship | 1 | .0019 | 0.417 | .521 |
| Parents Facilitate Autonomy | 1 | .0014 | 0.320 | .573 |
| Parents Role in Emotional Support | 1 | .0337 | 7.515 | .008** |
| Ethnic Identity | 1 | .0031 | 0.693 | .408 |
| Other-Group Orientation | 1 | .0097 | 2.162 | .146 |
| Residual | 73 | Mean Square = 627.94 | | |
| *Latinas* ($n = 62$) | | | | |
| Tolerance | 1 | .0057 | 0.721 | .400 |
| Quality of Relationships | 1 | .2012 | 25.263 | .000*** |
| Affective Quality of Relationship | 1 | .0012 | 0.145 | .705 |
| Parents Facilitate Autonomy | 1 | .0015 | 0.190 | .665 |
| Parents Role in Emotional Support | 1 | .0422 | 5.298 | .026* |
| Ethnic Identity | 1 | .0119 | 1.493 | .228 |
| Other-Group Orientation | 1 | .0683 | 8.567 | .005** |
| Residual | 48 | Mean Square = 476.66 | | |
| *Whites* ($n = 88$) | | | | |
| Tolerance | 1 | .0018 | 0.254 | .616 |
| Quality of Relationships | 1 | .1405 | 19.724 | .000*** |
| Affective Quality of Relationship | 1 | .0094 | 1.326 | .253 |
| Parents Facilitate Autonomy | 1 | .0005 | 0.071 | .791 |
| Parents Role in Emotional Support | 1 | .1091 | 15.319 | .000*** |
| Ethnic Identity | 1 | .0024 | 0.340 | .562 |
| Other-Group Orientation | 1 | .0160 | 2.244 | .138 |
| Residual | 74 | Mean Square = 662.66 | | |

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

TABLE 3

Separate Hierarchical Regressions for Residents and Commuters on Autonomy ($N = 325$)

| Variable | *df* | $R^2$ Change | *F* Change | *p* value |
|---|---|---|---|---|
| *Residents* ($n = 189$) | | | | |
| Tolerance | 1 | .0035 | 1.261 | .263 |
| Quality of Relationships | 1 | .1875 | 67.734 | .000*** |
| Affective Quality of Relationship | 1 | .0013 | 0.462 | .498 |
| Parents Facilitate Autonomy | 1 | .0031 | 1.114 | .293 |
| Parents Role in Emotional Support | 1 | .0510 | 18.422 | .000*** |
| Ethnic Identity | 1 | .0001 | 0.022 | .881 |
| Other-Group Orientation | 1 | .0283 | 10.239 | .002** |
| Residual | 173 | Mean Square = 600.71 | | |
| *Commuters* ($n = 136$) | | | | |
| Tolerance | 1 | .0093 | 3.243 | .074 |
| Quality of Relationships | 1 | .1721 | 59.833 | .000*** |
| Affective Quality of Relationship | 1 | .0059 | 2.041 | .156 |
| Parents Facilitate Autonomy | 1 | .0000 | 0.002 | .963 |
| Parents Role in Emotional Support | 1 | .0643 | 22.351 | .000*** |
| Ethnic Identity | 1 | .0003 | 0.093 | .761 |
| Other-Group Orientation | 1 | .0291 | 10.104 | .002** |
| Residual | 120 | Mean Square = 473.64 | | |

**$p < .01$. ***$p < .001$.

Separate hierarchical regressions were also performed for residents (those living in university residence halls or sorority houses) and commuters (those living in off-campus rental housing, with parents or relatives, in their own homes, or other housing). After entering the biographical correlates on the first step, each factor was entered last to determine the unique contribution of each For resident students the full model accounted for 52.11% of the variance, $F(15) = 12.55$, $p < .0001$. For commuter students the full model accounted for 65.49% of the variance, $F(15) = 15.18$, $p < .0001$. For residents the biographical correlates, when entered on the first step, accounted for 9.44% of the variance, 146 $F(8) = 2.34$, $p < .02$; for commuters the biographical correlates, when entered on the first step, were nonsignificant, $F(8) = 1.52$, $p < .16$. For both groups Quality of Relationships. Parental Role in Providing Emotional Support (inverse relationship), and Other-Group Orientation contributed significantly to the explanation of variance in autonomy scores, as shown in Table 3.

**DISCUSSION**

This study was focused on factors related to autonomy: biographical correlates (age, class year, race/ethnicity, and residence status); development along the vector of freeing interpersonal relationships (Chickening, 1969); parental attachment (Kenny, 1987b); and racial/ethnic identity (Phinney, 1990). The entire Journal of College Student Development regression equation explained 55.40% of the variance in autonomy scores for the entire sample.

Three factors that made significant independent contributions to autonomy, after the contribution of the biographical correlates was accounted for, involve relationships with others: Quality of Relationships, Parental Role in Providing Emotional Support, and Other-Group Orientation. These three factors accounted for 26.65% of the total variance in autonomy. The biographical correlates, when entered on the first step, accounted for 8.64% of the variance, $F(10) = 2.97$, $p < .001$. The combination of factors which, due to their intercorrelation, did not make *independent* contributions to the explanation of the variance accounted for the remainder. As in Greeley and Tinsley's (1988) study, the best predictor of autonomy in all cases (overall sample, the four

racial/ethnic groups, both residence statuses) was interpersonal relationships. The literature supports this correlation between interpersonal relationships and autonomy for college women (Greeley & Tinsley, 1988; Straub, 1987).

The Quality of Relationships scale used in this study measures the shift in interpersonal relationships "from either extreme dependence or independence, toward a state of interdependence" (Hood & Mines, 1986, p. 5/1). In its movement toward interdependence, this vector mirrors the progression of the vector of developing autonomy (Chickering, 1969). Perhaps it is the culmination in interdependence that autonomy and quality of relationships share that accounts for this finding. This notion is supported by the significantly high correlations of Quality of Relationships with the Interdependence ($r = .48$, $p < .01$) and Emotional Independence-Peers ($r = .57$, $p < .01$) subscales of autonomy found in this study.

It may be that mature interpersonal relationships provide a context for the development of autonomy. Stable and mature relationships may provide women with a secure base from which to develop autonomy. Based on the high correlation of Quality of Relationships with Emotional Independence-Peers, it may be primarily relationships with peers that provides this base.

Women may develop autonomy through managing peer relationships. The process of becoming less dependent on friends may teach women the process of becoming more independent generally. This may represent a kind of horizontal *decalage*, described by cognitive development theorists as the taking of an experience and using it as an analogy to other areas of experience (Perry, 1970, 1981; Piaget, 1952). Perry (1981) described the process in cognitive development: “Individuals mature their cognitive structures at different rates in different areas of their lives. They can thus transfer the more advanced patterns of thought learned from one area to areas in which they have been thinking more simplistically” (p. 89). In much this same way, women may transfer what they have learned about becoming more independent in the sphere of peer relationships to other areas of their lives.

In this study, Quality of Relationships accounted for 17.61% of the variance in autonomy for the entire sample. Only one other study (Greeley & Tinsley, 1988) explored predictors of autonomy. In that study development along the vector of freeing interpersonal relationships (which the researchers called "intimacy") accounted for 17.10% of the variance in autonomy scores in the overall (male and female) sample. However, when only the women were considered, intimacy explained 24.10% of the variance. In comparing these findings it is important to note differences in the instrumentation and possibly in the sample. Greeley and Tinsley (1988) operationalized the constructs of autonomy and intimacy using the Autonomy and Mature Interpersonal Relationships scales of the Student Development Task Inventory, second edition (SDTI-2) (Winston, Miller, & Prince, 1979), not the instruments than were used in the current study. Differences in findings may be due to the differences in instrumentation. In addition, the Mature Interpersonal Relationships scale of the SDTI-2 measures both aspects (Tolerance and Quality of Relationships) of this vector, whereas the MJIRI used in the current study measures them separately. In the current study 17.61% of the variance was explained by only one aspect, Quality of Relationships. Finally, although the sample in Greeley and Tinsley's study encompassed all four class years and represented both commuters and residents roughly equally, no description is given of the racial/ethnic composition of the sample. If Greeley and Tinsley's sample was more racially/ethnically homogeneous than the sample in the current study, more explanation by a single factor might be expected.

The second largest contribution to autonomy in the current study was made by the PAQ scale, Parental Role in Providing Emotional Support, which accounted for 6.51% of the variance in autonomy and was related inversely to autonomy, suggesting that excessive emotional support from parents inhibits women's development of autonomy. Development requires a delicate balance of challenge and support: if students are overchallenged, they will retreat; if they are over-supported, they will stagnate (Sanford, 1966). Because autonomy may not fit society's expectations for women, parents may not be as inclined to view this oversupport and resulting developmental stagnation as inappropriate. It may also be that parents' withdrawal of emotional support stimulates young women's autonomy development. This finding also may indicate that women who are more autonomous may be less likely to look to their parents as a source of emotional support, whereas women who

are less autonomous may be more inclined to seek emotional support from parents. It is important to note that this scale measured students' perceptions of parental support rather than parental *perceptions* or actual behaviors. It is possible that less autonomous women are more inclined to view their parents as providing more emotional support than are more autonomous women.

The third significant factor was the Other-Group Orientation scale of the MEIM, which accounted for 2.53% of the variance, This scale assesses "attitudes toward, and interactions with, ethnic groups other than one's own" (Phinney, 1992, p. 161). As Other-Group Orientation increases, so does autonomy. possibly reflecting a movement away from values, opinions, and attitudes imparted by family as well as movement away from reliance on the opinions and social structures of one's own ethnic group, The 148 movement away from immersion in one's own ethnic group, which includes denigration of other groups (Sue & Sue, 1990), represents development of autonomy from that group in terms of both attitudes (emotional autonomy) and instrumental independence (seeking out others to fulfill one's social needs).

These same three factors emerged as significant when residents and commuters were considered separately. Overall, residents and commuters were more similar than different in factors related to their development of autonomy.

When the four racial/ethnic groups were considered separately, the same three factors emerged as significant for Latinas, whereas only two of the three factors (Quality of Relationships and Parental Role in Providing Emotional Support) emerged as significant for African American, Asian American, and White women. In all four cases the best predictor of autonomy was Quality of Relationships. For Latinas, Other-Group Orientation explained more of the variance in autonomy (6.83%) than did Parental Role in Providing Emotional Support (4.22%).

Overall, it appears that the factors contributing to autonomy development, and their relative importance, are more similar than different between the racial/ethnic groups. Parental Emotional Support appears to play a larger role in White women's development of autonomy (10.91% compared to 3.37 to 4.22% for the other racial/ethnic groups), indicating differences based on race/ethnicity or another factor or factors, such as acculturation. In addition, Other-Group Orientation plays a significant independent role in the prediction of autonomy for Latinas and not for the other racial/ethnic groups. Perhaps through developing positive attitudes toward, and building relationships with, members of other racial/ethnic groups Latinas develop autonomy.

A number of factors did not make significant independent contributions to the prediction of autonomy: Tolerance, Affective Quality of Relationship with Parents, Parental Fostering of Autonomy, and Ethnic Identity. The lack of independent contributions from these factors may be due to their relatively high intercorrelations. The smaller sample sizes when the racial/ethnic groups were considered separately may have contributed to the absence of other significant findings.

Perhaps the most surprising finding of all these analyses was the amount of explanation achieved. Both technical and theoretical considerations may help to clarify this finding. A number of the factors used in this study were both highly correlated with the dependent variable and intercorrelated with one another. This point is more than merely technical. The constructs themselves are related: the development of freeing interpersonal relationships mirrors the development autonomy in the parallel movement from dependence through independence to the culmination in interdependence. These findings, combined with previous research (Greeley & Tinsley, 1988; Straub, 1987), support this researcher's hypothesis that, at least for women, these two developmental vectors are not separate.

**IMPLICATIONS**

The current study supports and extends previous research and the theoretical literature on women's development. For women, autonomy and interpersonal relationships appear to be intricately related. This study

illuminates aspects of the vector of developing autonomy (Chickering, 1969) and the relationship between autonomy development and interpersonal relationships.

Chickering's (1969) model, long relied upon by student development professionals, does not appear to fit well the development of college women in its description of the sequence, content, and process of developing autonomy and interpersonal relationships. Although the vectors of developing autonomy and freeing interpersonal relationships mirror each other in process, Chickering clearly viewed them as two separate constructs, rather than as the related constructs they appear to be. The revised Chickering model (Chickering & Reisser, 1993) still treats these vectors as separate constructs. Greeley and Tinsley (1988), finding intimacy as a predictor of autonomy (as did the current study), suggested a different sequencing of those two developmental tasks from that proposed by Chickering in both the earlier and revised models.

It appears that interpersonal relationships provide a context for the development of autonomy for women, as suggested by Miller (1986) and Stern (1990). Stable and mature relationships may provide women with a secure base from which to develop autonomy, as suggested by Bowlby (1969, 1988). Women may also find and develop autonomy through a process similar to that described in cognitive development theory as horizontal decalage (Perry, 1970, 1981; Piaget, 1952): the process of becoming less dependent in one sphere may teach women the process of becoming more independent generally.

The findings of this study also indicate that both similarities and differences exist in development between various subgroups. On one hand, these findings support the use of developmental theory across various subgroups of traditional-age undergraduate women. On the other hand, these findings demonstrate that caution needs to be used in applying theory. Unexplored differences may exist between various subgroups of the increasingly diverse student population.

The current study has added to the growing body of research that indicates the limited applicability of Chickering's (1969) psychosocial model of college student development. Yet, Chickering's model is probably the most widely used theoretical base in the field of student affairs. In graduate programs in student affairs, faculty need to make clear to students the limitations of the model and teach the existing and emerging theory that extends, corrects, and replaces the model.

In student affairs graduate programs, faculty also need to teach about the growing body of theories and research that illuminates the experiences of diverse populations of students. For too long, theories and examples have been based on the experiences of White, male, residential students enrolled at elite institutions in the 1960s, whose experiences simply do not reflect those of female students, non-White students, students who live off campus, students who attend different kinds of institutions, and students of today in general.

Student affairs professionals need to recognize the inappropriateness of the application of the concept of autonomy, as defined by Chickering (1969), to women. Women also appear to develop autonomy in a different way—through relationships with others. Therefore, in making decisions about matters such as majors, careers, courses, and living arrangements, undergraduate women may need the opportunity to reflect and consult others beforehand; such opportunities need to be made available in a structured and systematic way. Women's development of autonomy can also be promoted through active efforts to build community and relationships on campus through strategies including cooperative learning, cluster scheduling of classes, encouraging study groups, and fostering community in campus organizations and residence halls. In working with women on their psychosocial developmental issues, student development professionals, whether in an advising or counseling role or other student affairs position, may need to help undergraduate women draw analogies from one experience to another, promoting horizontal *decalage* in psychosocial development.

Much student development programming has typically been planned around Chickering's (1969) developmental vectors. Autonomy programming or interventions for women might more appropriately emphasize interdependence rather than separation. Carefully crafted community service and service learning programs can

promote the development of interdependence by providing students with opportunities to "learn lessons about reciprocity, compromise, sacrifice, consensus, and commitment to the welfare of the larger community" (Chickering & Reisser, 1993, p. 140).

## RECOMMENDATIONS FOR FUTURE RESEARCH

Further research is needed to articulate the connection between women's development of autonomy and interpersonal relationships. Further refinement of instrumentation used to measure these developmental constructs will aid research. Qualitative studies might also address the process and content of women's autonomy development. Findings from a variety of institutions (small colleges, women's colleges, historically Black institutions, community colleges) could be compared to investigate possible institutional influences on autonomy development. In addition, there are other factors relating to autonomy development to be explored, including employment, patterns of change in residence status, and roommate status and relationships.

Given the importance of interpersonal relationships in women's development of autonomy, further research that focuses on the interdependence aspect of autonomy rather than on separation, could illuminate the intricate connection of interpersonal relationships and autonomy in women's development.

## REFERENCES


Ainsworth, M. O. S., Blehar, M. C., Walters. E., & Wally, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum.

Bowlby, J. (1969). *Attachment and loss: Vol. I. Attachment*. New York: Basic Books.

Bowlby, J. (1988). *A secure base*. New York: Basic Books.

Boyer, E. L. (1987). *College: The undergraduate experience in America*. New York: Harper & Row.

Chickering, A. W. (1969). *Education and identity*. San Francisco: Jossey-Bass.

Chickering, A. W., & Reisser, L. (1993). *Education and identity* (2nd ed.). San Francisco: Jossey-Bass.

Chodorow, N. (1978). *The reproduction of mothering*. Berkeley: University of California Press.

Dinnerstein, D. (1976). *The mermaid and the minotaur: Sexual arrangements and human malaise*. New York: Harper & Row.

Erikson, E. (1963). *Childhood and society* (2nd ed.). New York: Norton.

Erikson, E. (1964). *Insight and responsibility*. New York: Norton.

Erikson, E. (1968). *Identity: Youth and crisis*. New York: Norton.

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.

Gilligan, C. (1988). Adolescent development reconsidered. In C. Gilligan, J. V. Ward, J. M. Taylor, & B. Baridge (Eds.), *Mapping the moral domain* (pp. vii-xxxix). Cambridge, MA: Harvard University Press.

Greeley, A. T., & Tinsley, H. E. A. (1988). Autonomy and intimacy development in college students: Sex differences and predictors. *Journal of College Student Development, 29*, 512-520.

Henton, J., Lemke, L., Murphy, C., & Haynes, L, (1980). Crisis reaction of college freshmen as a function of family support systems. *Personnel and Guidance Journal, 58*, 508-510.

Hood, A. B., & Jackson, L. M. (1986). The Iowa Developing Autonomy Inventory. In A. B. Hood (Ed.), *The Iowa student development inventories* (pp. 3/1-3/12). Iowa City: Hitech Press.

Hood, A. B., & Mines, R. A. (1986). Freeing of interpersonal relationships. In A. B. Hood (Ed.), *The Iowa student development inventories* (1986) (pp. 5/1-5/12). Iowa City: Hitech Press.

Jackson, L. M., & Hood, A. B. (1985). Iowa Developing Autonomy Inventory. In A. B. Hood (Ed.), *The Iowa student development inventories* (1986) (pp. 3/5-3/8). Iowa City: Meech Press.

Kenny, M. E. (1987a). The extent and function of parental attachment among first-year college students. *Journal of Youth and Adolescence, 16*(l), 17-29.

Kenny, M. E. (19876). Family ties and leaving home: Recent findings and implications. *Journal of College Student Personnel, 28*, 438-442.

Kenny, M. E., & Donaldson, G. A. (1991). Contributions of parental attachment and family structure to the social and psychological functioning of first-year college students. *Journal of Counseling Psychology, 38*, 479-486.

Miller, J. B. (1986). *Toward a new psychology of women* (2nd ed.). Boston: Beacon.
Mines, R. A. (1977). *Development and validation of the Mines-Jensen Interpersonal Relationships Inventory*. (Iowa Student Development Project Technical Report 46). Unpublished manuscript, University of Iowa. Iowa City.
Mines, R. A. (1978). *Change in college students along Chickering's vector of freeing interpersonal relationships.* (Iowa Student Development Project Technical Report #26). Unpublished manuscript, University of Iowa, Iowa City.
Moos, R. (1985). *Family Environment Scale manual*. Palo Alto, CA: Consulting Psychologists Press.
Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco: Jossey-Bass,
Perry, W. G., Jr. (1970). *Forms of intellectual and ethical development in the college years: A scheme*. New York: Holt, Rinehart, & Winston.
Perry, W. G., Jr. (1981). Cognitive and ethical growth: The making of meaning. In A. W. Chickering & Associates (Eds.). *The modern American college* (pp. 76-116). San Francisco: Jossey-Bass.
Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin. 108*, 499-514.
Phinney, J. S. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with adolescents and young adults from diverse groups. *Journal of Adolescent Research, 7*, 156-376.
Piaget, J. (1952). *The language and thought of the child*. London: Routledge and Kegan Paul.
Sanford, N. (1966). *Self and society*. New York: Atherton.
Schafer, W. (1992). Reporting hierarchical regression results. *Measurement and Evaluation in Counseling and Development, 24*, 98-100.
Stern, L. (1990). Conceptions of separation and connection in female adolescents. In C. Gilligan, N. P. Lyons, & T. J. Hanmer (Eds.), *Making connections: The relational worlds of adolescent girls at Emma Willard School* (pp. 73-87). Cambridge, MA: Harvard University Press.
Straub, C. A. (1987). Women's development of autonomy and Chickering's theory. *Journal of College Student Personnel, 28*, 198-205.
Straub, C. A., & Rodgers, R. F. (1986). An exploration of Chickering's theory and women's development. *Journal of College Student Personnel, 27*, 216-224.
Sue, D. W., & Sue, D. (1990). *Counseling the culturally different: Theory and practice*. New York: Wiley.
Taub, D. J., & McEwen, M. K. (1991). The patterns of development of autonomy and mature interpersonal relationships in Black and White undergraduate women. *Journal of College Student Development, 32*, 502-508
Taub, D. J., & McEwen, M. K. (1992). The relationship of racial identity attitudes to autonomy and mature interpersonal relationships in Black and White undergraduate women. *Journal of College Student Development, 33*, 439-446.
White, D. B., & Hood, A. B. (1989). An assessment of the validity of chickering's theory of student development. *Journal of College Student Development, 30*, 354-361.
Winston, R. B., Jr., & Miller, T. K. (1987). *Student Developmental Task and Lifestyle Inventory manual*. Athens, GA: Student Development Associates.
Winston, R. B., Jr., Miller, T. K., & Prince, J. S. (1979). *Assessing student development: A preliminary manual for the Student Development Task Inventory (rev. 2nd ed.) and the Student Developmental Profile and Planning Record*. Athens. GA: Student Development Associates.