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# A LONGITUDINAL STUDY OF MORAL, RELIGIOUS, AND IDENTITY DEVELOPMENT IN A CHRISTIAN LIBERAL ARTS ENVIRONMENT

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Moral, religious, and identity development were assessed in a longitudinal study by sampling students enrolled at a Christian liberal arts college during their first semester, and again 3½ years later. Those who continued enrollment to their senior year (persisters) were found to make greater gains in moral reasoning and greater movement toward identity achievement than those who did not continue enrollment (nonpersisters). Persisters were also found to decline significantly in religious well-being, particularly females, and extrinsic religiosity, while not changing in Shepherd scores or in intrinsic religiosity. Nonpersisters were found to increase significantly in intrinsic religiosity. Significant differences were found between students of different identity statuses in moral reasoning and religiosity. Results also indicate that identity status interacts with development of moral reasoning and religiosity, with those at the identity achievement or moratorium level gaining the most in moral reasoning and showing more positive changes in religiosity.

Educational opportunities in the U.S. are many and diverse, and students looking for a post-high school education have a plethora of choices. One of those choices is to pursue a college degree in a faith-based college or university. Christian colleges and universities provide opportunities for students to pursue traditional courses of study, as well as religious and ministry options, in a milieu that is consistent with their religious beliefs. Through required courses, chapel programs, ministry opportunities, the integration of faith into

course work, and interaction with Christian faculty and staff, Christian colleges and universities educate students about their faith, provide a supportive environment to explore faith issues, and present opportunities for students to put their faith into action. Christian educational institutions exist not only to provide a liberal arts education but also to encourage the religious development of their students.

Research efforts to assess the impact of Christian colleges and universities have looked at a variety of qualities, including student values and beliefs, ethical behavior, moral reasoning, and identity status. Ironically, it has been suggested that because of their conservative intellectual milieu, Christian institutions both promote "liberal" thinking and hinder development of moral reasoning. Responding to the concern that students in liberal arts colleges become "liberal," McNeel (1991) concluded from his studies that students can develop their abilities to make moral judgments without becoming liberal in their religious beliefs. In response to the Hickerson and Laramée (1976) and Rest (1979) suggestion that a conservative religious environment would retard the development of moral reasoning, Shaver (1987) longitudinally studied students at a Christian liberal arts college and a Bible college, finding both that students at the two institutions were significantly different from one another at time of entry, and that after studying at the institutions "neither the Christian liberal arts nor the Bible college students stopped or regressed in their development of moral judgment" (p. 217).

In a study designed to broadly assess student moral, ethical, and value development at Christian colleges, Buiet, Butman, Burwell, and Van Wicklin (1989) used both qualitative and quantitative meth-

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ods with freshmen and seniors at three Christian colleges. Buier et al. found that students attending Christian institutions make significant improvements in their ability to reason at higher moral levels and are similar to students at secular institutions. Studies assessing moral development using the Defining Issues Test (DIT; Rest, 1979) generally show that students at Christian liberal arts colleges and universities are similar to students at secular schools in moral reasoning. In fact when Pascarella and Terenzini (1991) conducted a secondary analysis of some of Rest's (1979) data, they found that students at church-affiliated Christian liberal arts colleges had moral reasoning scores higher than those at private universities, public research universities, two-year colleges, and public comprehensive universities.

In research to assess identity status changes among Christian college students, Buier et al. (1989) used the Marcia (1966) interview procedure and found students at the Christian institutions they studied moved toward more mature levels of identity status. In Marcia's approach, identity status is determined by assessing whether the person has experienced a crisis (i.e., a clear decision-making period about values and beliefs) and/or made a commitment (i.e., stability in values and beliefs). Those who have not experienced crisis nor made a commitment are said to be *diffused*; those who have made a commitment without experiencing a crisis are *foreclosed*; those who are in crisis are said to be in *moratorium*; and those who have experienced crisis and made a commitment are *identity achieved*. Freshmen in the Buier et al. sample fell primarily into the ego identity statuses of diffusion, foreclosure, or moratorium, but the senior sample was found to have many fewer students in the diffused category and a higher percentage of students in the achieved category. Although 60% of the students remained in the foreclosed or moratorium category, the authors noted that "more than half of the seniors are in the more developmentally advanced moratorium and identity achieved statuses" (p. 76). Similarly, Van Wicklin, Burwell, and Butman (1994) found that, as freshmen, 80% of students were foreclosed or diffused, but 3½ years later only 49% were. The movement toward more mature identity statuses is typical of students attending secular colleges as well (Pascarella & Terenzini, 1991).

Researchers have also demonstrated a relationship between identity status and other areas of student development. Bourne (1978a, 1978b) reported

improved learning outcomes with identity development, and Van Wicklin et al. (1994) found that students who remained foreclosed in their identity status through college demonstrated less ability at higher moral reasoning than students who moved to more mature identity statuses. Since the mission of liberal arts colleges has never been limited to simply intellectual development and includes personal and social development, the connection between identity status, learning, and moral development is consistent with that mission. The additional goal of spiritual and religious nurturing at Christian colleges suggests one might look for a relationship between identity status development and religiosity.

Buier et al. (1989) also examined value development using the Rokeach Values Survey (Rokeach, 1973), finding little difference between freshmen and seniors in terms of instrumental values (i.e., modes of conduct) or terminal values (i.e., states of existence). The top four terminal values for freshmen were "salvation," "true friendship," "family security," and "wisdom." The senior sample was similar with the only difference being that "mature love" replaced "family security," a change which is consistent with Erikson's conception of development, where the adolescent crisis of identity versus role confusion is superseded by the crisis of intimacy versus isolation. The top four instrumental values of their freshman sample were, "honest," "loving," "forgiving," and "responsible." The seniors differed only in replacing "responsible" with "helpful." Although their years at a Christian college produced little change in values, it should be noted that these values were quite different than those held by students at secular institutions. Buier et al. reported that the top four terminal values for Rokeach's college sample (Rokeach, 1968) were "freedom," "happiness," "wisdom," and "self respect." It's interesting to note that the values highly ranked by students at Christian institutions are generally other-oriented (including relationship to God), whereas those at secular institutions are generally self-oriented. In examining the results of their initial study of student development at Christian institutions, Buier et al. wrote: "Students at Christian colleges are graduating with similar beliefs and comparable growth as college students in general, and are leaving with almost the same values as they brought with them when they arrived" (p. 76).

Given the lack of data showing different developmental paths for students at Christian and secular institutions, it could be concluded that there is no

advantage, or disadvantage, to attending a Christian college. However, it may also be that the qualities studied may not be those that the Christian experience impacts. For example, moral reasoning may be too closely tied to education level to make it sensitive to Christian influence, if it is affected at all. In explaining the persistent finding that a college education facilitates moral development, Rest (1988) found evidence supporting three contributory factors: generalized understanding of the social world, intellectual stimulation, and self selection. More succinctly, Rest argued that *predisposition* and *opportunity* are the keys to benefiting from the college experience, and young people who take advantage of the opportunity to attend college and then who are engaged in the college experience (e.g., study, enjoy learning, have academic goals, choose friends who are serious students) are more likely to benefit from it. Since students who choose to attend a Christian college are a self-selected group and have opportunities not available to them at a secular institution, at least some of those who persist at these institutions should benefit from the experience. However, the instruments used in previous studies to assess Christian higher education (e.g., measures of moral reasoning) may not tap into the unique opportunity that Christian colleges afford. For example, studies specifically assessing the impact of Christian colleges on religious values and beliefs have used survey data (e.g., Hunter, 1987; Railsback, 1993) rather than scales designed to assess qualities of religiosity. Since it is the pervasive religious quality that distinguishes Christian colleges and universities, it would seem reasonable to include in studies of the development of students at Christian institutions measures that attempt to tap into these qualities.

The purpose of this study is to examine the development of students selecting a Christian liberal arts education with a focus on qualities that may particularly benefit from attendance at a Christian institution.

## METHOD

### *Participants*

The participants were selected from two entering freshmen classes enrolled at a Christian liberal arts college which clearly identifies itself as a faith-based school through its mission statement, promotional literature, and application materials. Although faculty are expected to sign a statement of faith, students

are not. Participants were selected from a college orientation course required of all new freshmen students. Of the 437 students enrolled in the freshmen course, 402 students sufficiently completed some or all of the scales to be included in the study, for a 92% participation rate. Fifty-five percent of our original participants continued enrollment either to their senior year or to early graduation, and of these, 94 participated in the second sampling (43.3% of those who continued to enroll; *persisters*). Participation from those students who did not continue enrolling at the college was difficult to obtain, and only 35 students returned sufficiently completed scales (19.7% of those in the original sample who did not continue to enroll; *nonpersisters*).

Of those nonpersisters who continued in the study, the largest percentage (71%;  $n = 25$ ) reported they continued their education, with the others reporting they left the college to marry, work, join the military, or other. Of those who left to pursue an education elsewhere, 6 went to community college, 13 to state colleges or universities, 2 to private colleges, and 4 to other Christian colleges. Of these, 9 had graduated with bachelor's degrees at the time of the second sample.

The sample of persisters was 29% male (27 participants) and 71% female (67 participants). The sample of nonpersisters was 26% male (9 participants) and 74% female (26 participants). The mean age of the persisters and nonpersisters as freshmen was 18.2 years. Eighty-four percent of the persisters, and 74% of the nonpersisters reported that their parents' marriages were intact. The percent of minority students participating was small and insufficient for meaningful analysis.

The largest percentage of the persisters, 43%, came from small towns (population < 50,000), with another 27% from cities (population 50,000 to 200,000). The remainder reported living on farms (11%), in large cities or metropolitan areas with a population over 200,000 (16%), or did not respond to the question (3%). The largest percentage of nonpersisters was also from small towns (41%), with 20% from farms, 20% from cities, and 18% from large cities or metropolitan areas; 1% did not report.

The persisters reported that 55% of their mothers and 67% of their fathers had college or graduate degrees, and the nonpersisters reported that 45% of their mothers and 72% of their fathers had college or graduate degrees. Among persisters, family incomes were primarily reported in the \$25,000-

\$49,999 range (47%), with 26% in the \$50,000-\$74,999 range and 16% earning over \$75,000. Nonpersisters reported that 59% of family incomes were in the \$25,000-\$49,999 range, with 10% in the \$50,000-\$74,999 range and 13% earning over \$75,000.

A wide range of protestant denominations were represented and, to facilitate reporting, the denominations were grouped into categories. The largest percentage of the persisters (22%), indicated they were "Nondenominational," 20% were categorized as "Wesleyan," 20% as attending "Peace Churches," 15% as "Baptist," 9% as "Pentecostal," and 5% in "Mainline" denominations; 9.2% indicated "none" or left the item blank. Approximately 40% of the nonpersisters were classified as Nondenominational as freshmen, 14% as Wesleyan, 11% as attending Peace Churches, 11% Baptist, 11% Pentecostal, 3% in Mainline denominations, and 8.6% indicated "none" or did not answer the question.

Participants were asked to describe their theological beliefs, with 74.9% of persisters and 73.5% of nonpersisters describing themselves as "somewhat conservative," "conservative," or "very conservative." Three of the persisters and one of the nonpersisters described themselves as "not Christian." In terms of their political beliefs, 70.1% of the persisters and 82.3% of the nonpersisters described themselves as "somewhat conservative," "conservative," or "very conservative."

### *Procedure*

Scales were distributed through a fall semester course required of all freshmen, and most scales were completed during class time. Because of time constraints, some students were allowed to complete one or more of the scales in their residences. Two methods were used in order to encourage participation, either the opportunity to enter a drawing for a cash reward, or course points for participation. An alternative assignment was available for students who did not choose to participate. The second round of data collection took place 3½ years after the students enrolled as freshmen. Persisters and nonpersisters were contacted and asked to complete the same scales and a similar demographic instrument. Follow-up requests involved either phone calls or a post card and a second mailing of the scales.

### *Instruments*

Scales were selected that would connect the current study with other studies of the impact of Christian higher education, as well as scales that would focus on the religious/spiritual development of students. As freshmen, all subjects were asked to complete the Shepherd Scale (Bassett et al., 1981), the Religious Orientation Scale (Allport & Ross, 1967), the Spiritual Well-Being Scale (Ellison, 1983), the Defining Issues Test (Rest, 1993), the Objective Measure of Ego Identity Status (Adams, Bennion & Huh, 1989), and a demographic scale. The same scales were used in the second sample, except the demographic scale was modified to gather additional data and to make it relevant to both persisters and nonpersisters.

*Shepherd Scale.* The developers of this scale began with biblical descriptions of what it means to be a Christian rather than secular perspectives, and as a result the scale may have more face validity when used with participants with conservative religious views. The scale is based on the assumption that "there is, to some degree, an observable and measurable life pattern which is distinctly Christian" (Bassett et al., 1981; p. 342). The 38-item scale produces scores that range from 38 to 152. The Shepherd Scale consists of two subscales measuring *belief* and *walk*; however, subsequent validity analysis suggests the scale measures general Christianity, and that the two subscales are highly correlated (Pecnik & Epperson, 1985).

*Religious Orientation Scale.* Allport's Intrinsic-Extrinsic Religious Orientation Scale (ROS) is a widely-used scale that measures two basic qualities of religiosity labeled *intrinsic* and *extrinsic* (Allport & Ross, 1967). The 21-item version of the scale requires respondents to indicate the degree to which they agree or disagree with a series of statements. The sum of the intrinsic items will range from 9 to 45 and the sum of the extrinsic items, from 12 to 60. The ROS has a long history and extensive validity and reliability data (Donahue, 1985a).

*Spiritual Well-Being Scale.* This scale is based on the assumption that a feeling of well-being would have both a religious and a psychosocial component. This 20-item scale produces three scores: a religious well-being (RWB) score (well-being in relation to God), an existential well-being (EWB) score (a sense of life purpose and satisfaction), and a spiritual well-being (SWB) score that is

a sum of the other two. Each subscale can range from 10 to 60. The scale has been shown to be reliable and valid (Bufford, Paloutzian, & Ellison, 1991).

**Objective Measure of Ego Identity Status.** This scale (EOMEIS-2) was developed as an alternative to the clinical interview approach to assessing the identity status of adolescents and young adults (Grotevant & Adams, 1984). Both approaches to identity status use the qualities of crisis (i.e., a clear decision-making period) and commitment (stability in values and beliefs) to assess the state of identity formation. Those who have not experienced crisis nor made a commitment are said to be *diffused*, those who have made a commitment without experiencing a crisis are *foreclosed*, those who are in crisis are said to be in *moratorium*, and those who have experienced crisis and made a commitment are *identity achieved*. Identity status is assessed in two areas, Ideology (i.e., occupation, religion, politics, philosophy) and Interpersonal (i.e., friendship, dating, sex roles, recreation). For both interpersonal and ideology identity status, subscale scores are generated for achievement, moratorium, diffusion, and foreclosure and range from 8 to 48. A variety of studies support EOMEIS-2 validity and reliability (see Adams et al., 1989). Comparison with the Marcia (1966) interview approach to identifying identity status indicates moderate to high agreement (Adams & Montemayor, 1987; Bennion, 1988).

**Defining Issues Test.** The Defining Issues Test (DIT) is based on Kohlberg's cognitive reasoning approach to moral development and is a widely-used scale with extensive reliability and validity data (Rest, 1993). The scale poses moral dilemmas and asks the reader to make a decision about the dilemma, indicate how relevant certain additional information would be, and rank the items in importance. The scale yields several scores which indicate the level of moral thinking, including *A*, which represents anti-establishment attitude, *M*, which is a measure of internal reliability, *P*, which is a sum of the three highest stages of moral reasoning converted to a percent, *D*, which is a composite score utilizing all stages, and *U*, or *utilizer*, which indicates whether participants used justice concepts in moral decision-making. Development of moral reasoning is commonly viewed as more frequent use of Stage 5 and 6 reasoning, and, for this reason, *P* is the most frequently reported score.

## RESULTS

The DITs were scored by The Center for the Study of Ethical Development at the University of Minnesota. Data were analyzed using SPSS for the MacIntosh computer. A .05 alpha level was used as the standard for all analyses. *T* tests were performed on the freshmen data, comparing students who continued to enroll to their senior year (persisters) and students who did not continue (nonpersisters) to determine if the two groups differed on any of the dependent measures at the beginning of the study, and no significant differences were found. Since only 19.7% of the nonpersisters participated in the complete study, it is important to know if those who continued to participate represent the 80.3% who did not. To partially answer this, *t* tests were performed on the freshmen data, comparing nonpersisters who participated in the second half of the study with those nonpersisters who did not participate in the second half. There were no significant differences between nonpersisters who completed the study and nonpersisters who did not complete the study.

An analysis comparing the denominational preferences of the sample as freshmen with their preferences 3½ years later found a small shift toward a non-denominational preference. After 3½ years, 32.5% of the persisters indicated they were Nondenominational, 15.7% were categorized as Wesleyan, 16.9% as attending Peace Churches, 6.7% as Baptist, 14.6% as Pentecostal, 3.4% in Mainline denominations, and 9% reported "None" or left the question blank. After 3½ years, approximately 50% of the nonpersisters were classified as Nondenominational, 6.3% as Wesleyan, 6.3% as attending Peace Churches, 18.8% as Baptist, 15.6% as Pentecostal, none fit the category of Mainline denominations, and 3.1% indicated "none" or left the question blank.

For those who reached the spring semester of their senior year, we found there was little change in self-described theological beliefs, with 71.5% of persisters describing themselves as "somewhat conservative," or "conservative" (none of the seniors indicated they were "very conservative"). Though, as freshmen, 3 of the eventual persisters had indicated they were "not Christian," none of the seniors selected this option. Self-described political beliefs also showed little change, with 74.8% of the senior persisters indicating they were "very conservative," "conservative," or "somewhat conservative."

**Table 1**  
*Ideology Ego Identity Status of Persisters and Nonpersisters*

Ego Identity Status	Persisters			
	Freshmen ( <i>n</i> = 84)		Seniors ( <i>n</i> = 87)	
	<i>n</i>	%	<i>n</i>	%
Diffused	7	8.2	7	8.0
Foreclosure	17	23.3	9	10.2
Moratorium	50	53.3	52	60.2
Achievement	4	13.3	4	13.3

Ego Identity Status	Nonpersisters			
	Freshmen ( <i>n</i> = 30)		+ 3½ years ( <i>n</i> = 30)	
	<i>n</i>	%	<i>n</i>	%
Diffused	3	10.0	4	13.3
Foreclosure	7	23.3	1	3.3
Moratorium	16	53.3	21	70.0
Achievement	4	13.3	4	13.3

**Table 2**  
*Impersonal Ego Identity Status of Persisters and Nonpersisters*

Ego Identity Status	Persisters			
	Freshmen ( <i>n</i> = 85)		Seniors ( <i>n</i> = 88)	
	<i>n</i>	%	<i>n</i>	%
Diffused	12	14.4	7	8.0
Foreclosure	23	27.1	11	12.5
Moratorium	41	48.2	50	56.8
Achievement	9	10.6	20	22.7

Ego Identity Status	Nonpersisters			
	Freshmen ( <i>n</i> = 30)		+3½ years ( <i>n</i> = 30)	
	<i>n</i>	%	<i>n</i>	%
Diffused	4	13.3	4	13.3
Foreclosure	7	23.3	1	3.3
Moratorium	16	53.3	21	70.0
Achievement	3	10.0	4	13.3

Nonpersisters also showed little change in theological and political beliefs, with 77.1% indicating they were "very conservative," "conservative," or "somewhat conservative" in theological and political beliefs. As freshmen, only 1 of the eventual nonpersisters indicated he or she was "non-Christian," but 3½ years later, 3 selected this option.

*Identity Status.* Analysis of the EOMEIS-2 data from the freshmen and senior samples of persisters

indicated changes in both ideology identity status (Table 1) and interpersonal identity status (Table 2). Movement of the persisters as a whole, in both interpersonal and ideology identity status, was toward more mature levels as seen in the decrease in the percentage of students classified in foreclosure and the increased percentage in achievement. Crosstabs analysis revealed that 29% of the persisters moved to a more mature ideology identity status and 17%

**Table 3**  
**Results of Paired T Tests for Identity Status Shifts**

Ego Identity Status	Ideology			
	Persisters ( <i>n</i> = 81)		Nonpersisters ( <i>n</i> = 25)	
	Freshmen	Seniors	Freshmen	+3½ years
Achievement	33.17 (4.96)	33.80 (4.72)	31.92 (6.38)	30.68 (5.18)
Moratorium	24.96 (5.68)	22.50 (5.32)***	23.84 (5.56)	21.44 (5.29)*
Foreclosed	20.44 (5.62)	17.23 (5.78)***	19.42 (6.62)	17.08 (5.61)
Diffused	20.46 (5.47)	18.14 (5.26)***	21.08 (6.17)	20.12 (7.04)

Ego Identity Status	Interpersonal			
	Persisters ( <i>n</i> = 81)		Nonpersisters ( <i>n</i> = 25)	
	Freshmen	Seniors	Freshmen	+3½ years
Achievement	32.35 (5.52)	33.28 (6.00)	32.40 (5.50)	32.84 (4.95)
Moratorium	26.46 (5.50)	24.01 (5.48)***	25.28 (6.51)	23.40 (5.36)
Foreclosed	21.08 (7.16)	18.14 (7.06)***	18.48 (7.655)	17.88 (5.66)
Diffused	20.59 (5.94)	18.73 (5.42)**	19.58 (6.25)	21.12 (5.20)

*Note.* Standard deviations shown in parentheses.

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

moved to a less mature status. Crosstabs analysis showed that 39% of the persisters moved to a more mature interpersonal identity status, and 12.2% moved to a less mature status. Since the EOMEIS-2 generates a score for each type of identity status, it is possible to analyze changes for each subscale. Paired *t* tests of ideology and interpersonal identity status for freshmen and senior persisters confirmed the move toward more mature identity status, with significant reductions in mean scores for diffused, foreclosed, and moratorium (Table 3).

Analysis of changes in ideology identity status subscale scores for nonpersisters found a significant reduction from the first sampling to the second only in moratorium scores (Table 3). Individual analysis of the interpersonal identity status shifts for nonpersisters found as many of the subjects moving down a status as moving up (*n* = 5), and though the changes in scores were sufficient to produce a shift in categorization, particularly a sharp decrease in foreclosure, the underlying change in foreclosure scale scores was not significant,  $t(24) = 1.79, p = .086$ . Crosstabs analysis showed that 36% of the nonpersisters moved to more mature interpersonal identity statuses (only one participant moved to a lower status),

but there were no significant changes in interpersonal identity status subscale scores for nonpersisters.

**Moral Reasoning.** According to Rest's recommendation (Rest, 1993), students with *M* scores greater than 8 were excluded from analysis. Analysis of DIT results indicated a significant change in *P* and *D* scores for the persisters, but not in *U* or *A* scores (Table 4). Analysis of the DIT results for nonpersisters found a significant change in *D* and *U* scores, but not in *P* or *A* scores (Table 4).

**Religiosity.** Comparison of the freshmen and senior samples for the persisters indicated no significant change in *SWB* or *EWB* scores; however, there was a significant change in *RWB* scores, with the seniors ( $M = 52.0, SD = 8.2$ ) scoring lower than when they were freshmen ( $M = 54.0, SD = 8.0$ ),  $t(84) = 2.00, p < .05$ . There were no significant changes in Shepherd Scale scores or on the intrinsic subscale of the *ROS*. On the extrinsic subscale of the *ROS*, senior scores ( $M = 24.89, SD = 7.4$ ) were significantly lower than their freshmen scores ( $M = 27.87, SD = 6.7$ ),  $t(82) = 3.82, p < .001$ .

Comparison of the scores of the nonpersisters as freshmen and 3½ years later found no significant change in *SWB*, *RWB*, or *EWB*. There was a signifi-



**Table 4**  
*Defining Issues Test Results for Persisters and Nonpersisters*

Sample	Scale scores							
	P		D		A		U	
	M	SD	M	SD	M	SD	M	SD
Persisters ( <i>n</i> = 66)								
Freshmen	37.03	14.10	25.55	8.27	1.32	1.57	.172	.148
Seniors	43.71***	13.21	29.23***	6.56	1.52	2.34	.218	.188
Nonpersisters ( <i>n</i> = 17)								
Freshmen	36.61	23.80	22.32	7.83	1.73	2.65	.104	.177
+3½ Years	39.88	10.36	26.97*	7.79	1.00	1.41	.220**	.157

*Note.* P is a sum of the three highest stages of moral reasoning converted to a percent; D is a composite score utilizing all stages; A represents antiestablishment attitude; U indicates whether participant used justice concepts in moral decision making.

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

cant difference on the intrinsic subscale of the ROS, with the “+3½ years” sample scoring higher ( $M = 20.42$ ,  $SD = 8.2$ ) than the freshmen ( $M = 18.2$ ,  $SD = 6.72$ ),  $t(30) = 2.08$ ,  $p < .05$ , but not for the extrinsic subscale. There were no significant differences found between the freshmen and the +3½ years samples on the Shepherd Scale.

**Identity Status and Moral and Religious Development.** To examine the relationship between identity status, moral reasoning, and religiosity, one-way analyses of variance (ANOVAs) were performed for each of the measures of moral and religious development, with ideology identity status (Table 5) and interpersonal identity status (Table 6) as the independent variables. There were no significant differences between students of different identity statuses for M scores. For ideology identity status, we found significant main effects for each of the dependent measures except for M (meaninglessness) and U (utilizer). In general, participants classified as diffused had lower SWB scores, lower Shepherd Scale scores, higher A scores, and both higher intrinsic and extrinsic scores than participants with other identity statuses. Students who scored at the ideology achievement level as freshmen had the highest Shepherd Scale, SWB, RWB, EWB, U, D, and P scores. Those in the identity achievement category had both lower extrinsic and intrinsic scores.

ANOVA, using interpersonal ideology status as the independent variable (Table 6), found a significant main effect for DIT A scores but not for any other

DIT score. There were significant main effects for each of the other dependent variables, with diffused participants scoring lower than other identity statuses on SWB, RWB, EWB, and the Shepherd Scale. Diffused participants were higher than other identity statuses in intrinsic and extrinsic religiosity. Foreclosed participants were lower than the other identity statuses for extrinsic and intrinsic religiosity, and higher for RWB, WEB, and Shepherd Scale scores.

To examine the relationship between identity status change and moral and religious development, participants were divided into three groups based on their progress in forming an identity. Participants who remained in either the foreclosed or diffused statuses or dropped into those categories were grouped together, those who moved out of diffused or foreclosed to a more mature identity status were in a second group, and those who were in moratorium or achievement as freshmen and remained there were in a third. The groups were labeled stagnant, maturing, and mature, respectively. Significant ANOVA results for the combined persisters and nonpersisters sample using ideology identity status as the independent variable can be seen in Table 7.

Separate analysis of the persisters found a significant main effect for P scores,  $F(2, 68) = 4.96$ ,  $p < .01$ , with the identity-mature students scoring highest ( $M = 44.98$ ,  $SD = 12.76$ ) followed by the maturing ( $M = 38.21$ ,  $SD = 15.61$ ) and stagnant ( $M = 31.61$ ,  $SD = 9.78$ ). Sample size of the nonpersisters was insufficient for analysis. There were no signifi-

**Table 5****Mean Freshman Moral Reasoning and Religiosity Scores by Ideology Identity Status**

	Diffused ( <i>n</i> = 26-37)		Foreclosed ( <i>n</i> = 45-54)		Moratorium ( <i>n</i> = 169-211)		Achievement ( <i>n</i> = 32-39)	
A*	2.29	(2.29) <sup>a</sup>	1.58	(1.78)	1.22	(1.77)	1.18	(1.62)
U	.127	(.14)	.112	(.13)	.166	(.15)	.181	(.14)
D***	18.23	(7.83) <sup>a</sup>	20.88	(6.08)	23.67	(8.08)	25.18	(5.79)
P*	31.17	(12.96)	29.25	(14.02)	34.67	(12.94)	35.75	(12.85)
ROS Extrinsic**	32.78	(7.17) <sup>a</sup>	28.74	(7.39)	28.79	(6.98)	26.82	(6.35)
ROS Intrinsic***	27.94	(8.46) <sup>b</sup>	17.43	(5.97)	19.84	(7.55)	17.56	(5.37)
SWB***	86.58	(16.23) <sup>b</sup>	104.29	(10.11)	99.64	(15.67)	107.12	(11.22)
RWB***	43.15	(10.34) <sup>b</sup>	54.64	(5.89)	51.55	(9.97) <sup>c</sup>	56.28	(6.18)
EWB***	43.70	(7.81) <sup>b</sup>	49.65	(5.97)	48.07	(7.64)	50.57	(7.70)
Shepherd <sup>d</sup> ***	113.67	(19.07) <sup>b</sup>	132.88	(13.14)	130.39	(17.62)	136.25	(8.94)

Note. Standard deviations shown in parentheses.

<sup>a</sup>Significantly different from moratorium and achievement; Scheffe  $p < .05$ .

<sup>b</sup>Significantly different from foreclosed, moratorium, and achievement; Scheffe  $p < .05$ .

<sup>c</sup>Significantly different from achievement; Scheffe  $p < .05$ .

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

**Table 6****Mean Freshman Moral Reasoning and Religiosity Scores by Interpersonal Identity Status**

	Diffused ( <i>n</i> = 37-55)		Foreclosed ( <i>n</i> = 47-56)		Moratorium ( <i>n</i> = 152-187)		Achievement ( <i>n</i> = 37-44)	
A**	2.42	(2.19) <sup>b</sup>	.836	(1.45)	1.32	(1.77)	1.21	(1.71)
U	.181	(.16)	.133	(.14)	.152	(.15)	.165	(.14)
D	21.33	(8.48)	24.23	(7.25)	22.62	(7.77)	23.31	(7.52)
P	34.78	(14.02)	34.77	(12.25)	32.96	(13.87)	32.68	(11.12)
ROS Extrinsic*	30.22	(6.85)	26.23	(6.48) <sup>c</sup>	29.63	(7.18)	28.18	(7.16)
ROS Intrinsic*	22.71	(8.62)	16.35	(5.33) <sup>c</sup>	20.76	(7.99)	18.65	(7.27)
SWB**	92.22	(18.42) <sup>d</sup>	107.82	(9.60) <sup>c</sup>	98.82	(15.21)	102.21	(13.44)
RWB**	47.90	(11.69)	56.32	(5.20) <sup>b</sup>	50.85	(10.09)	53.05	(7.34)
EWB**	44.31	(9.22) <sup>d</sup>	51.50	(5.62) <sup>c</sup>	47.93	(7.09)	49.16	(7.74)
Shepherd**	126.13	(20.43) <sup>a</sup>	137.78	(7.35) <sup>c</sup>	127.27	(19.18)	132.43	(10.39)

Note. Standard deviations shown in parentheses.

<sup>a</sup>Significantly different from foreclosed, moratorium, and achievement; Scheffe  $p < .05$ .

<sup>b</sup>Significantly different from diffused and moratorium; Scheffe  $p < .05$ .

<sup>c</sup>Significantly different from moratorium and diffused; Scheffe  $p < .05$ .

<sup>d</sup>Significantly different from foreclosed, moratorium, and achievement; Scheffe  $p < .05$ .

<sup>e</sup>Significantly different from moratorium; Scheffe  $p < .05$ .

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

cant differences between interpersonally stagnant, maturing, and mature groups for any of the dependent variables.

**Gender.** Analysis for gender effects found no significant differences between males and females in

either the freshman sample or the senior/+3½ years sample for any of the DIT subscales. The results of *t* test analysis for gender differences on the measures of religiosity can be seen in Table 8. As freshmen, males in the initial sample scored significantly

**Table 7**  
*Ideology Identity Status Change and Moral and Religious Development*

	Stagnant ( <i>n</i> = 12-16)	Maturing ( <i>n</i> = 14-16)	Mature ( <i>n</i> = 53-66)
P*	36.21 (13.98)	37.87 (15.06)	44.88 (12.20)
D*	24.02 (4.35) <sup>a</sup>	27.34 (8.41)	29.49 (6.13)
ROS Extrinsic*	29.70 (7.37) <sup>a</sup>	24.25 (11.37)	24.80 (6.38)
ROS Intrinsic*	21.95 (8.25) <sup>a</sup>	16.56 (5.88)	16.47 (6.10)

Note. Standard deviations shown in parentheses.  
<sup>a</sup>Significantly different from mature; Scheffe  $p < .05$ .  
 \* $p < .05$ . \*\* $p < .01$ .

**Table 8**  
*Gender Differences in Religiosity*

	Freshmen		Senior/+3½ Years	
	Males ( <i>n</i> = 30-33)	Females ( <i>n</i> = 86-86)	Males ( <i>n</i> = 31-34)	Females ( <i>n</i> = 90-92)
Shepherd	129.0 (15.8)	135.6 (13.7)*	125.4 (17.6)	134.14 (11.6)*
SWB	94.7 (17.5)	105.8 (10.8)***	98.0 (16.8)	103.7 (11.9)
EWB	46.1 (8.3)	50.6 (5.8)**	48.9 (8.1)	51.1 (6.5)
RWB	48.7 (10.5)	55.2 (6.4)**	49.1 (9.9)	52.5 (7.5)*
Ros Intrinsic	21.5 (7.6)	16.6 (5.8)**	20.9 (7.8)	16.3 (6.1)**
ROS Extrinsic	28.9 (6.2)	27.4 (6.9)	27.6 (7.6)	24.5 (7.5)*

Note. Standard deviations shown in parentheses.  
 \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

lower than females on the Shepherd Scale, SWB, EWB, and RWB scales. Males scored significantly higher on the ROS intrinsic subscale. Analysis of the senior sample and the +3½ years sample combined found that males scored significantly lower than females on the Shepherd Scale and RWB scale, and significantly higher on the ROS intrinsic subscale and the ROS extrinsic scale (Table 8). However, the ROS extrinsic difference is a result of a significant reduction in female ROS extrinsic scores from the first sampling to the second,  $t(83) = 3.45, p < .001$ .

Analysis of the persisters and nonpersisters separately for gender differences found that the persisting males scored significantly higher as seniors only on the ROS intrinsic scale (males  $M = 19.17, SD = 7.28$ ; females  $M = 15.51, SD = 5.26$ ),  $t(84) = 2.76, p < .01$ . Nonpersisting males after 3½ years were significantly higher than females on the ROS intrinsic

scale (males  $M = 26.86, SD = 6.74$ ; females  $M = 18.23, SD = 7.54$ ),  $t(31) = 2.74, p < .05$ , and significantly lower on the Shepherd Scale (males  $M = 116.25, SD = 19.63$ ; females  $M = 133.59, SD = 14.40$ ),  $t(33) = 2.75, p < .05$ .

Examination of differences within gender to identify significant changes revealed that male persisters' mean scores decreased significantly in extrinsic religiosity from the freshmen to senior years, and that female persisters decreased significantly in RWB and in extrinsic religiosity (Table 9).

Analysis of changes within gender for the non-persisters are problematic, given the small number of nonpersisting males who participated, and results must be interpreted with caution. Results of the gender analysis indicate that males had increased significantly in extrinsic religiosity and that females had declined significantly in RWB (Table 9).

**Table 9***Change in Religiosity by Gender for Persisters and Nonpersisters*

	Persisters		
	Combined ( <i>n</i> = 82-85)	Males ( <i>n</i> = 22-25)	Females ( <i>n</i> = 60-61)
Shepherd	-1.1	-3.64	-.14
SWB	-.99	+.24	-1.5
EWB	+.77	+.88	+.72
RWB	-1.92*	-.84	-2.38*
ROS Intrinsic	-1.12	-1.41	-1.18
ROS Extrinsic	-3.08**	-3.37*	-2.75**
	Nonpersisters		
	Combined ( <i>n</i> = 21-31)	Males ( <i>n</i> = 6-8)	Females ( <i>n</i> = 22-23)
Shepherd	-2.69	-3.06	-2.57
SWB	-2.00	+4.67	-3.82
EWB	+.39	+6.00	+.14
RWB	-3.39	-1.33	-3.95*
ROS Intrinsic	+2.16*	+2.14	+2.17
ROS Extrinsic	-1.46	+5.00*	-3.33

\**p* < .05. \*\**p* < .01.**DISCUSSION***Identity Status*

Because of anticipated retention problems in a longitudinal study, we elected to use an objective measure of ego identity status in order to make it possible to sample a large number of students and to facilitate data collection from students who did not re-enroll. Although comparison of the objective scale with the Marcia interview approach to determining identity status indicates moderate to high agreement (Adams & Montemayor, 1987; Bennion, 1988), the results of our study vary with other studies assessing identity status using Christian college students.

Using the interview approach with Christian college students, Buier et al. (1989) reported 44.4% of the freshmen and 36.7% of seniors were foreclosed, and Van Wicklin et al. (1994) reported nearly 40% of the seniors in their sample were foreclosed. Using the objective measure of identity status, we found only 16.1% of our freshmen (*n* =

361) were ideologically foreclosed and 16.3% were interpersonally foreclosed. As seniors (*n* = 88) only 8.4% of our persisters were ideologically foreclosed and 10.1% were interpersonally foreclosed. The largest percentage of our freshman sample were classified as in moratorium in both ideology (60.9%) and interpersonal identity (54.7%), and as seniors the largest percentage of our persisters (*n* = 88) were in moratorium in both ideology (60.2%) and interpersonal identity (56.8%).

The discrepancy in results between the two approaches may be a result of several factors. First, the interview approach allows the researcher to follow up on answers to ensure clarity and possibly improve classification accuracy. Since classification of identity status depends on crisis and commitment, which are difficult to define and to judge, the interviewer can elicit additional information from subjects until enough information is available for the scorers to make a determination. This would suggest that the interview approach is more accurate. However, it may also be that the conser-

vative nature of the institutions where this research has been conducted may create demand characteristics that lead the participants to give the answers they feel are expected of them. Students at Christian colleges may feel that if they are "right with the Lord," they shouldn't have insecurities about their faith or the direction their life should go. The objective approach has the advantage of anonymity, allowing students to express ambivalent feelings and uncertainties and could explain why the objective approach finds the largest percentage of students in moratorium rather than foreclosed. Although our results are discrepant with some identity status studies using Christian students, Drovdahl and Steele (1991), using the interview approach at a Christian college and a mixture of freshmen to senior students ( $N = 38$ ), found, as we did, that the majority of their sample were in moratorium. Drovdahl and Steele reported that 13.2% of their participants were in the achievement category, 52.6% in moratorium, 21% in foreclosure, and 13.2% diffused. Given the discrepancy in results between researchers using different approaches to assessing identity status and the discrepancy between different researchers using the same methods, there is a clear need to continue identity status research at Christian institutions.

Regardless of whether the interview or objective scale approach is used to measure identity status, the results from various studies are consistent in that they show students who attend Christian institutions move toward identity achievement and away from less mature identity statuses. Whereas the ordinal nature of identity status classification using the interview approach makes it difficult to judge the degree of movement, the EOMEIS-2 allows not only ordinal classification but also provides interval data on each identity status dimension. The significant reductions in diffusion, foreclosure, and moratorium scores (see Table 3) detected by the EOMEIS-2 suggest that, though only a few students make the transition to classification as identity achievement, most students make progress in that direction. Reductions in diffusion, foreclosure, and moratorium scores are what would be expected of students who have been challenged to examine their beliefs, been provided role models, lived and learned with people of diverse Christian backgrounds, and explored and prepared for careers. Although in some ways it is disappointing that, as they reach the end of their

college experience, only 21.8% attained achievement in ideology and 23% interpersonal achievement, it may be that the lack of significant increases in achievement scores, combined with the significant decreases in the other identity status scores, indicates a readiness for identity achievement to be reached. Perhaps it is an appropriate role for Christian colleges and universities to prepare their students for identity formation, knowing they will have to take that last step alone. The fact that the nonpersisters who continued to participate in our study did not show similar changes in identity status supports the important role the college experience plays in moving people forward in identity formation. Unfortunately, the low return rate from the nonpersisters (19.7%) and the fact that several of those who did not persist continued their education elsewhere limits our ability to generalize; further research is needed.

### *Moral Reasoning*

Results of our longitudinal study are consistent with those studies that find Christian college students are like students at secular liberal arts institutions in making significant advances in moral reasoning. Rest (1993) reported a mean DIT P score for college students of 42.3 ( $SD = 13.2$ ), and the persisters in our sample scored an average of 43.4 ( $SD = 13.0$ ). This result is similar to results from other studies of Christian college students. Buier et al. (1989) found that seniors at three Christian colleges scored means of 39.83 ( $SD = 9.48$ ), 44.00 ( $SD = 12.19$ ), and 48.00 ( $SD = 10.65$ ).

Whereas the students who persisted in Christian higher education improved significantly in moral reasoning, we observed that those who did not persist did not (freshmen  $P = 36.61$ ,  $SD = 13.81$ ; +3½ years  $P = 39.88$ ,  $SD = 10.36$ ),  $t(16) = 1.47$ , *ns*. These results are consistent with studies that show a strong relationship between education and improvement in moral reasoning (Rest, 1986, 1988). Rest (1988) reported that "education accounted for 40-50 per cent of the variance of DIT scores" (p. 183). In the same way that formal education facilitates reaching higher cognitive levels (i.e., formal operational thought), it appears that education also facilitates moral reasoning and that Christian institutions do at least as well as secular institutions in developing that reasoning ability. Although it cannot be concluded that the Chris-

tian character of the college accounts for the gain in moral reasoning, it does suggest that those Christian qualities do not impede moral development as some have speculated (Hickerson & Laramée, 1976; Rest, 1979).

The finding that nonpersisters improved significantly in D scores but not P scores is due to differences in the way P and D are calculated. P is based only on the three highest stages of moral reasoning. Stages 5a, 5b, and 6, whereas D includes changes in Stages 2, 3, and 4. Using paired *t* tests, we found that nonpersisters had declined significantly in Stage 2 scores over the period of the study,  $t(16) = 2.08, p < .05$ . The significant improvement in D scores among nonpersisters, then, reflects declines in Stage 2 reasoning but not significant gains in reasoning at higher levels.

The nonpersisters also differed from the persisters in that the nonpersisters showed significant improvement in U scores. The utilizer score is meant to represent the degree to which people use their concepts of justice in making moral decisions. Those who indicate an action decision to resolve a moral dilemma that is logically consistent with the justice concepts they indicated as important would have a high U score. It has been suggested that religiously conservative people would rely on religious doctrine in making moral decisions instead of justice concepts and would therefore have lower U scores (Rest, 1993; Thoma, 1986). The fact that the nonpersisters significantly improved in U scores, whereas the persisters did not, lends some support to the view that religious doctrine suppresses the use of justice reasoning in making moral decisions (Table 4), since the pervasively religious environment of a Christian institution may promote doctrine-based decision making. However, though the nonpersisters did improve significantly between the two samplings, the difference in U scores between the senior persisters and nonpersisters 3½ years later was not significant,  $t(92) = .33, ns$ , and the significant gain by nonpersisters was a result of lower mean U scores as freshmen. Although the small sample size of the nonpersisters limits conclusions, these results suggest that, though the gains in moral reasoning the nonpersisters made were not as great as those of the persisters, after 3½ years they were at least equal in their tendency to apply justice concepts to moral dilemmas.

## *Religiosity*

For those in our sample who persisted at a Christian college, the overall trend was a reduction in feelings of religious well-being and a decrease in extrinsic religiosity (Table 9). According to Allport and Ross, the extrinsic disposition toward religion is marked by using religion to meet the person's needs (e.g., security, sociability, self-justification). Extrinsic religiosity is more likely to shape doctrine to meet their needs, rather than to be shaped by it. Although the extrinsic has turned toward God, at the same time he or she has kept the focus on self. Donahue (1985b) concluded that extrinsic religiosity is "the sort of religion that gives religion a bad name" (p. 422). In terms of Allport and Ross's and Donahue's definition of what it means to be extrinsic, the reduction in extrinsic religiosity that we found appears consistent with the goal of Christian colleges and universities. Through contact with Christian students and faculty, course work, ministry opportunities, chapel programs, Bible study, and worship, students are encouraged to develop a personal faith that takes them beyond the social functions of religion to a personally meaningful faith. And though the reduction in extrinsic religiosity is consistent with this goal, we found no increase in intrinsic religiosity. However, intrinsic and extrinsic religiosity are not polar opposites but rather orthogonal dimensions of religiosity.

Intrinsic religiosity is described by Allport and Ross (1967) as fully embracing one's religious beliefs and trying to live one's religion. Donahue (1985b) described intrinsic religiosity as "a good, unidimensional, nondoctrinal indicant of religious commitment" (p. 422). In our study we found that persisters did not change significantly in intrinsic religiosity, but that nonpersisters did increase significantly. We also found that interpersonally foreclosed students and, to a lesser degree, ideologically foreclosed students were lower in intrinsic religiosity than students in moratorium or diffusion. On the ROS intrinsic scale, foreclosed students scored more like the achievement students. Since both achievement and foreclosed students exhibit the quality of commitment, it suggests that the ROS intrinsic scale is acting as a kind of barometer of comfort level with a person's faith. Those who are diffused or in moratorium have unresolved faith questions and respond by reaffirming their personal relationship with God as expressed by higher levels of intrinsic commitment. Those with-

out unresolved issues—foreclosed and achieved students—may be less defensive when questioned about their faith, and this higher comfort level is reflected in lower levels of intrinsic religiosity.

The nonpersisters in our sample followed a different course of development from the persisters, increasing significantly in intrinsic religiosity and also declining in extrinsic religiosity, although not significantly: freshmen ( $n = 28$ ) RWB  $M = 52.68$ ,  $SD = 7.9$ ;  $+3\frac{1}{2}$  years ( $n = 28$ )  $M = 49.29$ ,  $SD = 9.36$ ;  $t(27) = 1.98$ ,  $p = .058$ . It may be that without the pervasively religious environment of a Christian institution and perhaps by leaving the family which may have functioned in the same way, the nonpersisters moved into a secular environment that is indifferent or even hostile to their religious beliefs. With their religious beliefs questioned or even threatened, they may respond defensively, like those students with unresolved faith issues, and strongly affirm their personal relationship with God.

The finding that the nonpersisters became significantly more intrinsic over the course of the study could be interpreted as supporting Hunter's (1987) conclusion that evangelical students at insulated institutions (i.e., where both faculty and students sign a statement of faith) have their Christian world view weakened whereas evangelical students at secular institutions (i.e., where neither the faculty nor the students sign a statement of faith) remain strong. However, our data show that students who remained in a Christian college did not become less intrinsic nor did they decline significantly in Shepherd Scale scores, which are designed to measure "an observable and measurable life pattern which is distinctly Christian" (Bassett et al., 1981, p. 342), indicating no decline of faith commitment among those who persisted in an evangelical Christian environment.

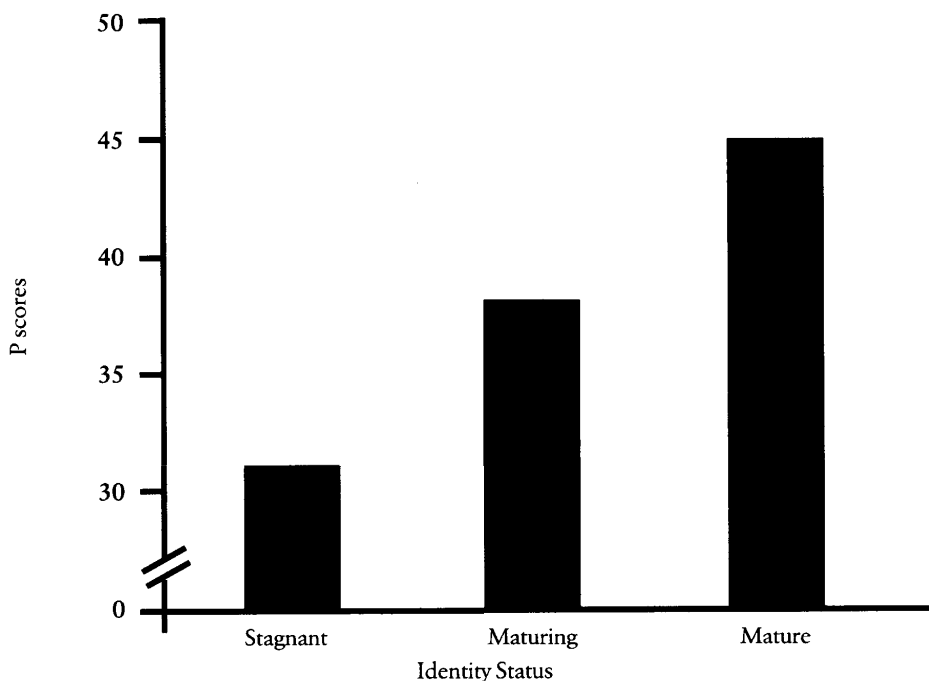
To increase in intrinsic religiosity scores by nonpersisters may be a "circling the wagons" response to a secular environment. If increases in ROS intrinsic scores is indeed a response to immersion in a secular environment, then follow-up research may find that persisters show similar significant increases in internalization after graduation. It would also follow that those who choose to work in religious environments after graduation (e.g., Christian institutions, ministry) would not show the same increases in intrinsic scores as those who are employed in secular settings.

### *Identity Status and Moral and Religious Development*

Analysis by ideology identity status found significant differences between freshmen of different identity statuses for all measures of moral development, except for U scores, and for all measures of religiosity. Analysis by interpersonal identity status found significant differences between freshmen of different identity statuses for the measures of religiosity, but, except for the A (antiestablishment) scores, no significant differences for the measures of moral development. These results suggest that religious beliefs are not limited to ideology identity formation, but are closely tied to interpersonal identity formation (i.e., friendship, dating, sex roles, and recreation) in a way that moral reasoning is not.

Our results also suggest that there is great comfort in being foreclosed. When sorted by interpersonal identity status (Table 6), foreclosed students have the highest Shepherd Scale scores, highest EWB scores, highest RWB scores, highest SWB scores, and lowest intrinsic scores. To be classified in foreclosure means the person has made a commitment to a set of beliefs but that the beliefs are unexamined (i.e., no crisis) and often borrowed from their parents. In many ways the foreclosed participants scored like those participants in identity achievement, suggesting it is the quality of commitment that promotes a feeling of well-being.

It is widely believed that a liberal arts education is supposed to challenge students and get them to question their beliefs and ways of thinking in order to open them to new ideas and new ways of thinking. For example, the fact that foreclosed students have lower P scores than identity achievement students suggests a need for growth in moral reasoning and that these students need to be pushed to think in new and more sophisticated ways. Many believe that a Christian college should do the same with religious beliefs, challenging and stretching students, and there is evidence from our study that this is what happens. However, given the clear beliefs and high levels of religious well-being of foreclosed students, it raises an ethical question. Should we take students who are committed to their particular brand of the faith—and are content—and break them out of it? Surely, if Christian colleges are going to push students out of foreclosure and encourage them to examine what they believe, then it is the responsibili-



**Figure 1.** P scores for Identity Stagnant, Identity Maturing, and Identity Mature persisters.

ty of those institutions to assist students to make the transition to owning their beliefs without losing their faith. The fact that persisters decline in diffusion, foreclosure, and moratorium scores and decline in extrinsic religiosity, while remaining steady in Shepherd scores and intrinsic religiosity, suggests they are indeed maintaining their evangelical commitment while examining their faith. The fact that they decrease in religious well-being at the same time seems to reflect the anxiety that accompanies a thoughtful examination of a person's religious faith.

As one would expect of students who have not engaged ideological issues (e.g., career, politics, religion), diffused students generally had lower moral and religiosity scores, although they scored higher in antisocial attitudes (A scores) and had both higher extrinsic and intrinsic religious orientation scores. The high extrinsic and intrinsic scores may reflect the lack of thoughtful consideration of moral and religious issues, with diffused adolescents selecting stereotypical evangelical responses without carefully considering the implications of the statements or the personal application.

Since identity development depends on crisis, it is reasonable to expect that it would be those partici-

pants wrestling with religious, political, moral, and personal issues who would change the most over the 3½-year period of the study. The finding that stagnant participants (those who did not move to a more mature identity status) were lower than mature participants (those in moratorium or achievement) in P and D and higher on extrinsic and intrinsic religious orientation supports the hypothesis that students develop when they engage issues. Although the sample size for nonpersisters was too small for analysis by identity status, analysis for persisters confirmed Van Wicklin et al.'s (1994) finding that those students who advanced in identity status gained the most in P scores (Figure 1). Our results also suggest that gains are not limited to moral reasoning, but are also reflected in changes in measures of religiosity (see Table 7). Unfortunately, the sample of nonpersisters was too small to separate the impact of identity status change from the impact of the college experience, and further research is needed. However, it appears that those participants who are in moratorium or achievement levels of identity status, or who move to these levels, make the greatest gains in religious and moral development, and those who persisted were more likely to make significant move-



ment toward moratorium and achievement than those who did not persist.

### Gender

As freshmen, there were clear differences between the males and females in religiosity. Males scored significantly lower on the Shepherd Scale, the Spiritual Well-Being Scale, and both its subscales, RWB and EWB. On the ROS, males scored significantly higher on the intrinsic subscale. There were no significant differences between freshmen males and females on the extrinsic subscale. These results suggest that males arrive at Christian colleges and universities at a different developmental point in terms of religiosity than do females and would therefore have different needs.

After 3½ years at a Christian institution, most of the gender differences were no longer significant. For the persisters, the only remaining significant difference was on the ROS intrinsic subscale, with males continuing to have higher scores. Although differences between genders were no longer significant in the senior year, there was actually very little change in religiosity scores, and the loss of significance for most of our dependent variables is a result of a decrease in sample size, rather than significant changes in religiosity. Examination of changes within gender found that male persisters and female persisters decreased significantly in extrinsic religiosity and that female persisters decreased significantly in religious well-being (Table 9). Overall, during the 3½ years of the study, both male and female persisters became less extrinsic in religious orientation, and the females declined in religious well-being toward the level the males had as freshmen. As we noted before, becoming less extrinsic in religious orientation is consistent with the goals of a Christian college and can be seen as a positive outcome in that it indicates that the person is less likely to use religion for social reasons, as a security blanket, or for self-justification.

Analysis of gender differences for the nonpersisters was problematic, given the small number of nonpersisting males who participated, and results must be interpreted with caution. For nonpersisters, after 3½ years, mean male scores on the Shepherd Scale were still significantly lower than those of the females, and mean male ROS intrinsic scores were still significantly higher than female scores. Results of analysis for within-gender changes indicates that

males had increased significantly in extrinsic religiosity, the opposite trend of those who persisted, and that females had declined significantly in religious well-being (Table 8), which is consistent with the general trend of the persisters.

### Summary

The results of our longitudinal study of students who selected a Christian college as freshmen suggest several broad trends. First, those in our sample who persisted to their senior year made more progress toward mature identity statuses and advanced more in moral reasoning than those who did not persist. Second, for those who persisted there were signs of active religious identity formation reflected by a decline in extrinsic religiosity (a positive outcome), a decline in religious well-being (indicating active engagement with religious issues), and continued religious commitment (e.g., high Shepherd scores). Keeping in mind that generalization from the small sample of nonpersisters must be done with caution, our results indicated that those who did not persist in Christian higher education became more intrinsic in their religiosity, which may reflect a defensive response much like those in dif-fused and moratorium identity statuses. Finally, there is evidence that those who are actively engaged in forming their identity (i.e., those in crisis) gain the most from the Christian college experience. This is consistent with Rest's (1988) argument that predisposition and opportunity are the keys to benefiting from the college experience.

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