

FOCUS SECTION: BUILDING CAPACITY FOR MISSION IN CATHOLIC HIGHER EDUCATION

Catholicism on Campus: Stability and Change in Catholic Student Faith by College Type

Mark M. Gray

Melissa A. Cidade

Center for Applied Research in the Apostolate (CARA),
Georgetown University, Washington, D.C.

Are Catholic colleges and universities failing in their mission of educating their Catholic students in the faith? Many believe these institutions are in one key way: A 2003 study commissioned by the Cardinal Newman Society concluded that “a survey of students at 38 Catholic colleges...reveals that graduating seniors are predominantly pro-abortion, approve of homosexual ‘marriage,’ and only occasionally pray or attend religious services” (Reilly, 2003, p. 38).

As disturbing as this profile may be to many Catholic Church leaders, it is a profile of attitudes and behavior that is not all that different from adult self-identified Catholics in the United States in general (Gray & Bendyna, 2008; Pew Forum on Religion & Public Life, 2008a, 2008b). Thus, one could conclude that Catholic higher education is just one of many Catholic educational institutions, including Catholic parishes and schools, that reach a broader Catholic population in the United States and are potentially having difficulties instilling the Catholic faith.

To understand if Catholic higher education is truly failing one must isolate changes that are occurring to students’ attitudes and behaviors *on campus*. Here we agree with the author summarizing the Cardinal Newman Society study who notes, “Regardless of where students begin their college journey, Catholic colleges should be helping students *move closer* [emphasis added] to Christ, and certainly doing a better job of moving students toward the Catholic faith than secular colleges do” (Reilly, 2003, p. 43). This represents a measurable outcome.

We, like the Cardinal Newman Society, rely on data from the Higher Education Research Institute (HERI) at the University of California, Los Angeles. The Cardinal Newman Society study was based on a survey of college freshmen in 1997 and a follow-up survey with students in their senior year in 2001. We rely on a more recent HERI longitudinal survey, which

included a new addendum: the College Student Beliefs and Values (CSBV) survey. Available data from this survey includes 14,527 students at 136 U.S. colleges and universities.¹ This survey was administered to freshman respondents in 2004 and again to these students as juniors in spring 2007.

Our analyses of these data are inspired by the quote above from the Cardinal Newman study author regarding the ability of Catholic colleges and universities to help Catholic students “move closer” to the Church and their faith. We measure whether students, regardless of their incoming attitudes and behavior, move closer, stay the same, or move further away from the Church while in college.

Background and Literature

The topic of Catholicism on U.S. college campuses has importance due to its sheer size. In terms of the population, Catholics make up the single largest faith group in the United States, with approximately 23% of adults self-identifying as such; more United States colleges and universities are affiliated with the Catholic Church than any other faith (245 institutions of higher learning).²

Ex corde Ecclesiae, the apostolic constitution written by Pope John Paul II in 1990, requires colleges and universities that seek to identify themselves as a Catholic institution to seek the affirmation of Church authorities. This document suggests that “Every Catholic University, without ceasing to be a University, has a relationship to the Church that is essential to its institutional identity. As such, it participates most directly in the life of the local Church in which it is situated” (John Paul II, 1990, para. 27). Further, *Ex corde Ecclesiae* identifies essential aspects for Catholic identity:

1. a Christian inspiration not only of individuals but of the university community as such; 2. a continuing reflection in the light of the Catholic faith upon the growing treasury of human knowledge, to which it seeks to contribute by its own research; 3. fidelity to the Christian message as it comes to us through the Church; 4. an institutional commitment to the service of the people of God and of the human family in their pilgrimage to the transcendent goal which gives meaning to life. (para. 13)

1 A total of 148 schools participated in the survey. However, 12 of these schools were eliminated by HERI due to address errors or because fewer than 25% of students for the institution responded to the survey (HERI, 2010).

2 This issue also moved to the national news forefront with the debate regarding President Obama’s visit and speech at the University of Notre Dame in May 2009.

The results of the Cardinal Newman Society's study question the ability of many Catholic colleges to fulfill this mission—especially in fulfilling the obligation of fidelity to the Christian message.

Other recent publications suggest that colleges and universities generally, and Catholic colleges and universities specifically, are “secularizing” their students. Some point to the lack of priests and religious brothers and sisters present on campus leading to a diminishing of Catholic identity (Burtchaell, 1998). Others argue that it is the Catholic higher education system's attempt at appealing to a wider audience that has caused their decline in Catholicity (Hendershott, 2009; Morey & Piderit, 2006).

Because of the diversity of Catholic higher education institutions, common measures of identity are nearly impossible to apply to all institutions even though they are recognized by the Catholic Church as being Catholic institutions. In fact, Arthur (2008) cites a lack of a “baseline of value priorities in Catholic institutions” (p. 199) as being a barrier to consistency in Catholic higher education. The result is “multiple and complex identities [that] result in varying degrees of intensity of religious affiliation” (p. 199).

Generally, research supports the notion that college students may change the way they express faith and spirituality over the course of their academic careers but are not likely to abandon it altogether. Comparing two samples of freshmen at two different universities with their corresponding responses on a follow-up survey in their senior year (3 years later), Hunsberger (1978) found that as seniors, students reported attending church services less frequently than as freshmen, but otherwise found little support for the theory that students “liberalize,” or become less religious, over their time in college. Clydesdale (2007) argues that a decline in religious participation must not be confused with decline in commitment; in this argument, college students put their religious identities in an “identity lockbox” to be developed after graduation because religious identity is not “relevant to [students'] college education and campus experience” (p. 2).

This “difference” in religious expression is probably more pervasive than the literature suggests. Dalton, Eberhardt, Bracken, and Echols (2006) argue that it may be that studies are only asking conventional questions, and are not looking at signs of independent religious thinking. While students may be participating less in the organized structures of religion, “student interest and involvement in spirituality remain high” (p. 3). In fact, when other measures of spirituality and faith are used, it is those without a college education that are more secularized. Using data from multiple rounds of the National Longitudinal Study of Adolescent Health (Add Health), Uecker, Regnerus, & Vaaler (2007) found that while religious decline “does indeed vary by

education level,” it is a (perhaps) counter-intuitive decline. Researchers found that “it is the respondents who *did not go to college* who exhibit the highest rates of diminished religiosity” (p. 1677). Indeed, those with the highest level of education “are the least likely to curtail their church attendance” (p. 1677). The authors suggest that the decline in attendance, which is evident in all young adults regardless of education but lowest for those with the highest levels of education, may have more to do with the increase in “responsibilities” and “opportunities” that take precedence over religious engagement and less to do with secularization caused by attendance at university.

But what of Catholic colleges and universities specifically? Bryant and Astin (2008) used HERI’s Cooperative Institutional Research Program (CIRP) and CSBV survey data to look at a number of correlates to spiritual struggling of college students. Of note, the authors found that those students attending a Christian church-affiliated institution (including Catholic colleges) were more likely to struggle spiritually than their peers at public institutions. The authors posit that this may be due to students being “encouraged to deal with difficult spiritual issues and claims” (pp. 13–14) at religiously affiliated colleges. A second potential source of this struggle may be that the students do not agree with the doctrinal convictions of the institution.

Similarly, Fay (1968) argues that regardless of the traditional means of transmitting Catholicity, students believe that “there is still enough traditionalism—or what is interpreted by the student as traditionalism—in the way Christianity is presented to minimize the fostering of religion among Catholic college students” (p. 143), suggesting that the lack of religious impact of Catholic colleges and universities may be more a result of students’ perceptions of religion on campus than of the actual “Catholic identity” of the college.

Around the same time, Wagner and Brown (1965) found that Catholic students at non-Catholic colleges not involved in Newman Clubs (Catholic student ministry organizations for non-Catholic campuses) were more influenced in choosing a non-Catholic college by “academic considerations,” but still more “by the desire to come personally closer to young people who essentially belong to the Protestant middle-class majority” (p. 87). Some were pushed to non-Catholic schools by the “‘narrowness’ of the Catholic educational system” (p. 87). On the other hand, Catholic students at non-Catholic colleges who were involved in Newman Clubs were more likely to point to “financial limitations” as their primary reason for choosing a non-Catholic college.

Hypotheses, Methods, and Data

Hypotheses

Ninety-nine percent of the Catholic students surveyed are of what is commonly referred to as the Millennial Generation (born 1982 or later). The differences in the faith lives exhibited by these students (Catholic and non-Catholic) and the students of the generation that immediately preceded them (Generation-X; born 1961 to 1981) have been characterized to be more nostalgic and yearning for tradition (Carroll, 2002). Yet, as Inglehart (1990, 1997; Inglehart & Welzel, 2005) has shown, the culture—beliefs and practices—of individuals is strongly affected by the level of security (e.g., economic, physical, social) that exists in their environment at the time they come of age (i.e., in high school and college). In comparison with the generations of their parents and grandparents or even their elder siblings, the Millennials are expected to be profoundly post-material, and, thus more tolerant of beliefs and practices that depart from tradition. Members of this generation came of age during an era of remarkable security and prosperity and therefore may be more interested in cultural issues and social movements that are not tied to economic concerns and generally to be very pluralistic in their outlook on life.³

In this regard, we have a general expectation that members of the Millennial Catholics, *regardless of their choice of college*, will generally hold attitudes that are in opposition to Catholic Church teachings on several important issues (e.g., regarding abortion, same-sex unions) and will exhibit religious practice that is lower in frequency (primarily Mass attendance) than what is expected by the Catholic Church. We expect that college life and much of what goes with it will generally also lead to a widening of these gaps. Consistent with the Cardinal Newman Society findings, we hypothesize that the college experience will lead to beliefs and practices diverging further from Catholic Church teachings and norms from the baseline freshman survey to the junior-year survey. In comparison to Catholics attending lower-cost public colleges and universities, we also expect Catholic students at Catholic colleges and universities may be moved slightly *further* away from the Church than toward it.

As private institutions without public subsidies, the average tuitions of Catholic colleges or universities are expensive compared with the in-state cost of attending a public college or university. Thus, it is not surprising that

3 As of 2004 and the spring of 2007 when the surveys were conducted, the U.S. economy had yet to experience the severe recession that would begin in December 2007. According to the National Bureau of Economic Research, this recession arguably would not be fully recognized by the public until mid- to late-2008. It may be that this generation will be less post-material in coming years as a result of having experienced this economic decline. However, this was not a factor at the time of the surveys.

some of the key differences between Catholics who choose a Catholic college over those who choose a public college or university (i.e., self-selection) are related to income and finances. Catholic students who are able to afford the costs of attending a Catholic college or university are likely to be, on average, better off socioeconomically than Catholic students attending a public college or university. The more financially capable a student may be, again on average, the more post-materialist that student's orientations should be in comparison with a student who cannot afford a Catholic college or university. Thus, the Catholic student attending a Catholic college or university may be *even more* inclined to diverge from Church teachings and norms than a Catholic student of lower socioeconomic status attending a public institution who may be more inclined to embrace traditional beliefs and practice.⁴

Instrumentation

All data used in this article are from the CSBV survey that was administered nationally to college freshman respondents in 2004 and again to these students as juniors in spring 2007. This survey was designed and conducted by HERI. The CSBV survey is an expanded form of HERI's annual CIRP college student surveys and includes more questions related to religion and spirituality than what is typically used.

The HERI data file (2009) utilized for the analysis was provided to the authors directly from HERI and the authors were only permitted to conduct the research summarized here.⁵ The authors did not have any role in the design of the questionnaire, sampling, data collection, weighting, and file formatting and are only privy to information about the methods used for these steps from public information and documents available from HERI. The authors also have no knowledge of the identity of the institutions that participated.

Participating colleges and universities are recruited nationally by HERI to be a part of the annual data collection and their participation in these surveys is voluntary. Thus, the sample of the institutions in the CSBV is neither random nor necessarily representative. It cannot be known if participating colleges and universities used the same methods for selecting students and

4 The changes in belief and practice among Catholic college students in general will also likely mirror those of non-Catholic students—whether they attend Catholic or non-Catholic colleges themselves. Too often the Catholic Church has focused on changes in belief and practice among its members in isolation from wider social forces. For example, many today still debate whether the decline in Mass attendance (as measured in Gallup surveys since the 1950s) is due to the changes of the Second Vatican Council, Church teachings on birth control, or clergy sex abuse scandals. Many of these commentators fail to observe or note that religious service attendance has declined among non-Catholics during this same period.

5 As a condition of the data use agreement our copy of the data file was destroyed upon completion of the project. These data are available from HERI.

administering the survey.⁶ Thus, at the level of the student, selection is also neither random nor necessarily representative. HERI uses weighting to correct for potential sampling distortions and to “approximate the responses we would have expected had all first-time, full-time students attending baccalaureate colleges and universities across the country participated in the survey” (HERI, 2010, p. 7).⁷ These data are used widely in social scientific studies of higher education, and, even with the limitations noted above, are among the best available data sources for national studies.

Participants

The freshman survey was administered by participating colleges and universities to 112,232 students at 236 colleges and universities in 2004. The junior-year follow-up survey in 2007 was administered directly by HERI to a sample of 36,703 of these same students at 136 of the colleges and universities that participated in 2004. Students were mailed a postcard reminding them of their participation in 2004 and alerting them to a follow-up survey that would be coming soon. Respondents receiving the survey could return it by mail with the stamped return envelope provided or answer online. A small cash incentive of either \$2 or \$5 was included as well. The process included reminders to those who did not initially respond. The response rate for the survey was 40% resulting in 14,527 respondents to the junior-year survey.

Of the 136 participating institutions, 34 were Catholic colleges or universities (25%). Most were private religious colleges or universities affiliated with a religion other than Catholicism ($n = 61$). Twenty-eight were private nonsectarian institutions and 13 were public colleges and universities. The unweighted total of student respondents at any institution in the survey who self-identified as Catholic on *both* the freshman- and junior-year surveys was 3,352 (23%).⁸ A total of 1,941 of these self-identified Catholics (58%) were enrolled at a Catholic college or university. Among the other Catholic respondents, 543 were enrolled at a public college or university, 479 at a private nonsectarian institution, and 396 at a private religious college or university unaffiliated with Catholicism. Statistical weighting, as recommended and provided by HERI (2009), was used in all phases of the analysis and these weights alter the counts and proportions noted above.

6 HERI excludes schools with response rates that do not meet their threshold. For the CSBV an institution needed at least a 40% response rate to the freshman survey to be included in the study.

7 The authors have very limited knowledge of how these weights were calculated as only a brief description from HERI exists in its methodology documents (HERI, 2010). Readers interested in more information should inquire with HERI.

8 This results in a margin of sampling error for this sub-group of respondents of ± 1.7 percentage points.

Data Analysis Procedures

Using these data, our research focuses on a breadth of potential outcomes that are classified into two groups including: a) beliefs and attitudes about social and political issues (e.g., abortion, death penalty, same-sex marriage, reducing pain and suffering in the world), and b) religious behavior (e.g., frequency of attendance at religious services, prayer, reading of religious texts and publications). With this analysis we seek to find how Catholic students' beliefs and attitudes regarding social and political issues that are important to their faith and religious practice change over the course of their college education. We expect that the college experience in and of itself, often including dislocation from family and childhood peers and exposure to many new ideas, will lead to changes in all Catholic students (as well as non-Catholic students) regardless of the sponsorship of the college or university they attend. However, we are primarily interested in any differences in the *magnitude* of change that may occur among Catholic students enrolled at a Catholic college or university and a campus that is not affiliated with the Catholic Church (also controlling for factors of self-selection of college type).

Descriptive Analysis

Our initial descriptive analysis is based simply on the measured differences between the freshman- and junior-year surveys on the relevant CSBV questions. Those responding in the same manner in the junior and freshman years have been "unchanged" by their college experience for any given issue or behavior. For example, respondents were asked in the survey about their agreement with the statement, "The death penalty should be abolished." They could respond *agree strongly* (4), *agree somewhat* (3), *disagree somewhat* (2), or *disagree strongly* (1). If a freshman responded agree somewhat in 2004 and then as a junior in 2007 responded in the same manner, then there is literally zero change (e.g., numerically 3 in 2004 and 3 in 2007) indicated by the respondent. Any other response is one where they have moved away from or more toward the position that is most consistent with the stance of the Catholic Church for this issue (i.e., agree strongly). If a respondent answered agree somewhat (3) in 2004 and then agree strongly (4) in 2007 there is a measurable change of +1 point on the scale toward the Catholic Church.

Thus, for each question studied, our analysis groups Catholic respondents by the type of institution they attend into three possible outcomes: They have moved "away from the Church" if the response is less consistent with the stance of the Catholic Church in the junior-year survey than in the freshman-year survey, they are unchanged if the response is identical in both surveys,

or they have moved “toward the Church” if the response is more consistent with the stance of the Catholic Church in the junior-year survey than in the freshman-year survey.

Using these methods allows us to isolate the *changes* occurring during college. However, they are less useful in understanding the students’ attitudes and behaviors in absolute terms. Thus, someone moving from agree strongly as a freshman with the statement “abortion should be legal” to agree somewhat as a junior has moved closer to the Church but is indeed still in disagreement with the Church on this issue. Yet, in understanding the impact of Catholic colleges and universities we are less concerned with how many Catholics at Catholic colleges are in agreement or disagreement with the Church on any particular issue upon leaving. They could have already had these attitudes upon entering college. In order to isolate the effects of the Catholic college environment and experience we are only concerned about how students’ attitudes, beliefs, and behavior became more or less consistent (or unchanged) with Church teachings and norms while they were in college. This again speaks to one of the key conclusions of the Cardinal Newman Society’s study: “Catholic colleges should be helping students *move closer* to Christ, and certainly doing a better job of moving students toward the Catholic faith than secular colleges do” (Reilly, 2003, p. 43).

Although our research is by no means a natural experiment, we are comparing samples of Catholic students who are or are not exposed to Catholic higher education and asking how they are changed at two points in time. Of course, no one is randomly assigned his or her college, and self-selection prevents us from being able to generalize in the manner of a natural experiment. However, the CSBV data indicate that the typical Catholic student at a Catholic college or university is in many ways similar to a Catholic student attending a public or state college or university. As for the few differences, Catholics who choose a Catholic college over a public college are slightly more likely to be female (61% compared with 55%), more likely to have attended a private religious high school (43% compared with 29%), to be age 18 or younger (71% compared with 60%), to have had “A” average grades in high school (32% compared with 22%), to have annual parental income of \$100,000 or more (44% compared with 30%), and to be using loans to finance their college education (71% compared with 55%).⁹

⁹ It is important to note that the freshman survey occurs after the college decision has been made. Students may not be entirely accurate or honest in describing their reasons for making their choice after the fact. Some rationalizing behavior is expected.

Dependent Variables

We looked at a broad set of indicators on which the Church has clear teachings or where Church leaders have made clear statements. Variables from the CSBV were selected on the basis of their ability to measure attitudes and behavior comparatively with the teachings and statements of the pope and the U.S. bishops regarding key Catholic teachings and behavioral expectations. For reference to religious practice we utilized the *Catechism of the Catholic Church* (1994). For reference to social and political issue stances we used *Forming Consciences for Faithful Citizenship: A Call to Political Responsibility from the Catholic Bishops of the United States* (United States Conference of Catholic Bishops [USCCB], 2007), a document produced by bishops in the United States prior to each presidential election. The scope of this research is limited to teachings and statements that have some sort of measurement capacity in the CSBV.

The dependent variables of our study are related to the issues and behaviors listed below. For each of these, we provide direct examples of related Church teachings, positions, and behavioral expectations.

Abortion. The USCCB (2007) states:

There are some things that we must never do, as individuals or as a society, because they are always incompatible with love of God and neighbor. Such actions are so deeply flawed that they are always opposed to the authentic good of persons. These are called “intrinsically evil” actions. They must always be rejected and opposed and must never be supported or condoned. A prime example is the intentional taking of an innocent human life, as in abortion and euthanasia. (p. 8)

The USCCB adds, “Abortion, the deliberate killing of a human being before birth, is never morally acceptable and must always be opposed” (p.19).

War and arms reduction. The U.S. bishops state, “We are called to be peacemakers in a nation at war” (USCCB, 2007, p. 1). The USCCB further adds:

Catholics must also work to avoid war and to promote peace....The Church has raised fundamental moral concerns about preventive use of military force.... Even when military force can be justified as a last resort, it should not be indiscriminate or disproportionate....The United States has a responsibility...to reduce its own reliance on weapons of mass destruction by pursuing progressive

nuclear disarmament. It also must end its use of anti-personnel landmines and reduce its predominant role in the global arms trade. (p. 20-21)

Death penalty. According to the USCCB (2007),

Society has a duty to defend life against violence and to reach out to victims of crime. Yet our nation's continued reliance on the death penalty cannot be justified....The USCCB supports efforts to end the use of the death penalty. (p. 21)

Discrimination and affirmative action. The U.S. Church claims, "We are too often divided across lines of race, ethnicity, and economic inequality" (USCCB, 2007, p. 1). Furthermore,

It is important for our society to continue to combat discrimination based on race, religion, sex, ethnicity, disabling condition, or age, as these are grave injustices and affronts to human dignity. Where the effects of past discrimination persist, society has an obligation to take positive steps to overcome the legacy of injustice, including vigorous action to remove barriers to education and equal employment for women and minorities. (p. 25)

The USCCB states it will "continue to oppose policies that reflect prejudice, hostility toward immigrants, religious bigotry, and other forms of discrimination" (p. 30).

Gun control. The U.S. bishops assert, "Supporting reasonable restrictions on access to assault weapons and handguns...are particularly important in light of a growing 'culture of violence'" (USCCB, 2007, p. 25).

Same-sex marriage. The Church states, "We are a society built on the strength of families, called to defend marriage" (USCCB, 2007, p. 1), and that "marriage must be defined, recognized, and protected as a lifelong commitment between a man and a woman" (p. 21).

Social welfare and progressive taxation. The USCCB (2007) states,

While the common good embraces all, those who are weak, vulnerable, and most in need deserve preferential concern....In a society marred by deepening disparities between rich and poor, Scripture gives us the story of the Last Judgment (see Mt 25:31-46) and reminds us that we will be judged by our response to the "least among us." (p. 14-15)

The U.S. bishops write, “Policies on taxes, work, divorce, immigration, and welfare should help families stay together and should reward responsibility and sacrifice for children” (p. 21). Furthermore,

Economic decisions and institutions should be assessed according to whether they protect or undermine the dignity of the human person.... Workers, owners, employers, and unions should work together to create decent jobs, build a more just economy, and advance the common good.... Welfare policy should reduce poverty.... Improving the Earned Income Tax Credit and child tax credits, available as refunds to families in greatest need, will help lift low-income families out of poverty. (pp. 22-23)

The USCCB adds, that “The United States should take a leading role in helping alleviate global poverty” (p. 26).

Church attendance. The *Catechism of the Catholic Church* (1994) states that “the Sunday Celebration of the Lord’s Day and his Eucharist is at the heart of Church life.... On Sundays and other holy days of obligation the faithful are bound to participate in the Mass” (pp. 582-583).

Prayer. Church documents state “It is always possible to pray.... Prayer is a vital necessity.... Prayer and Christian life are inseparable” (*Catechism of the Catholic Church*, 1994, pp. 722-723).

Reading sacred texts. According to the *Catechism of the Catholic Church* (1994), “The Church has always venerated the divine Scriptures as she venerated the Body of the Lord: both nourish and govern the whole Christian life” (p. 44). Furthermore, “The Church forcefully and specially exhorts all the Christian faithful... to learn ‘the surpassing knowledge of Jesus Christ’ by frequent reading of the divine scriptures” (p. 699).

Survey Questions

The following CSBV questions used in both surveys were selected as key outcomes based on the standards outlined above. We remind the readers of the limitations of the researchers due to the fact that they had no control over the research design, questionnaire, or specific questions. These questions are not perfect measures, but provide insight into change in students’ beliefs and behavior.

Social and political issues. A series of questions asked students about social and political issues. Students were given the following statements and asked to respond on a scale of *disagree strongly*, *disagree somewhat*, *agree somewhat*, or *agree strongly*:

- Abortion should be legal.
- The death penalty should be abolished.
- Wealthy people should pay a larger share of taxes than they do now.
- Same sex couples should have the right to legal marital status.
- Affirmative action in college admissions should be abolished.
- Federal Military spending should be increased.
- The federal government should do more to control the sale of handguns.

In addition, students were asked to respond how important “reducing pain and suffering in the world” and “improving the human condition” was on a scale of *not important*, *somewhat important*, *very important*, or *essential*.

Religious behavior. Several questions pertained to students’ religious behaviors. For example, students were asked how often they “attended a religious service” during the past year (responses to this question included *frequently*, *occasionally*, or *not at all*). In addition, students were asked how often they engaged in “prayer,” “reading sacred texts,” and “other reading on religion/spirituality” with response categories of *not at all*, *less than monthly*, *monthly*, *once per week*, *several times per week*, or *daily*.

Multivariate Multilevel Regression Analysis

Similar to the Cardinal Newman study, the initial descriptive analysis does not control for differences among college students at each type of campus. In order to account for these differences (i.e., factors that may be related to the selection of a type of college) and estimate statistical significance of results, we have also estimated multivariate regressions using mixed models in SPSS.¹⁰ These procedures were used due to the multilevel nature of the data (i.e., student respondents nested within different colleges).

Each of these regression models tests for the impact of college type with a specific focus on the estimated fixed effects of a Catholic student attending a Catholic college or university. The excluded reference category, required

10 Space limitations prevent a discussion of SPSS Linear Mixed Models. However, complete documentation for these procedures is available from SPSS (2005).

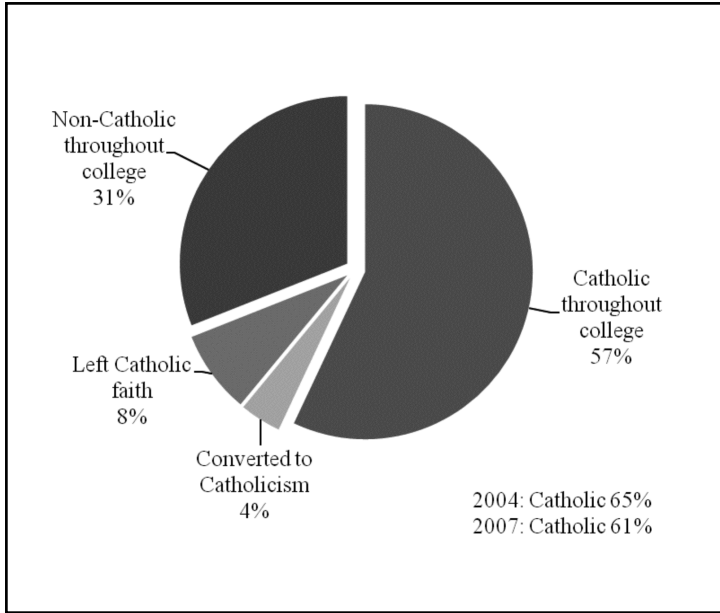


Figure 1. Faith change of students at Catholic colleges, 2004 to 2007.

for any regression analysis, is enrollment at a public college—the most frequently attended school according to weighted HERI (2009) estimates as well as an option that is most likely to be economically and geographically accessible to any student.

Results

Before addressing the changes in any of the beliefs, attitudes, and behaviors listed above, it is important to note that one central element of faith that may also change during college is religious identity itself.

Catholic Identification

Eight percent of students attending a Catholic college entered self-identifying their faith as Catholic but then left the faith for another or no religion at all at the time of the second survey (see Figure 1). The students who left the Catholic faith were less likely to have done the following in the 12 months *prior* to being surveyed the first time in their freshman year: attend religious services frequently (33% compared with 62% of those who remained Catholic throughout college), to indicate the religious affiliation of the college they were attending was very important to them when deciding where to

go to college (13% compared with 28%), and to indicate a belief in God (81% compared with 94%). Thus, the students who left the Catholic faith were already weak in practice or belief upon entering college. Those Catholics who left the faith in college were among the most likely in the second survey to say their faith had been weakened in college by the death of a close friend or family member, natural disaster, or the war in Iraq. They were also among the *most* likely to indicate they have frequently struggled to understand pain, suffering, and death, have felt distant from God, and have disagreed with family members about religion. They were among the least likely to indicate having taken religion classes in college.

Only 13% of those at Catholic colleges who entered self-identifying as Catholic and who did not self-identify as such in their junior year indicated in the survey that they had converted to another religion during college. The most common religious identification for students who no longer self-identified as Catholic as juniors was none.

It was also the case that 4% of students began college on a Catholic campus and did not self-identify as Catholic on the freshman-year survey but did identify as Catholic on the junior-year survey. This pattern of religious change and conversion mirrors changes more broadly identified in the U.S. Catholic population (Pew Forum on Religion & Public Life, 2008a).¹¹

The remaining analysis focuses only on those students who self-identified as Catholic throughout college.

Pro-life Issues

As shown in Table 1, Catholic students at Catholic colleges and universities were slightly less likely than Catholics at other types of colleges and universities to move away from the Church's stance on abortion. However, there is a net loss of 15 percentage points on this issue, with 31% of students changing their attitude about abortion and moving away from the Church and 16% moving toward the Church's position. A majority (53%) of Catholic students at Catholic colleges and universities had the same opinion on abortion in their junior year that they had as entering freshmen.

In absolute, rather than the relative terms used above (i.e., comparing 2004 and 2007), 56% of Catholic students at Catholic colleges said they disagreed strongly or somewhat that "abortion should be legal" in their junior-year survey. In the Cardinal Newman Society's study, a minority of Catholics

¹¹ Catholicism generally attracts fewer adult converts than other faiths, as one cannot simply sign up or join the Catholic Church easily. Instead, one must go through the Rite of Christian Initiation of Adults (often abbreviated RCIA), which typically entails 9 to 12 months of study in the faith guided by a sponsor and regularly scheduled religious education.

Table 1

Attitudinal Changes of Catholic Students on Life Issues by Type of College

	Away from the Church (%)	Unchanged (%)	Toward the Church (%)	Net Change
Abortion				
Catholic	31	53	16	-15
Public	36	47	17	-19
Private religious non-Catholic	33	53	14	-19
Private nonsectarian	35	47	18	-17
Death penalty				
Catholic	21	47	31	+10
Public	20	53	27	+7
Private religious non-Catholic	27	45	28	+1
Private nonsectarian	31	41	28	-3

were consistent with the Church on this issue. Thus, the results of this more recent survey show a cohort of Catholic college students more consistent with Church teachings on the issue of abortion. This level of disagreement is higher than that of Catholics in any other type of college.

The pattern for attitudes regarding the death penalty is slightly different. First, there was a net gain of 10 percentage points on this issue, with 21% of students changing their attitude and moving away from the Church and 31% moving toward the Church's position. Forty-seven percent did not change their attitude while in college.

Yet, just under half (49%) of Catholic students at Catholic colleges said they agreed strongly or somewhat that "the death penalty should be abolished" in their junior year. This level of agreement was higher than among Catholics at other types of colleges.

Thus, on pro-life issues the results indicate a mixed pattern for Catholic colleges and universities. A majority of Catholic students left college disagreeing with the legal status of abortion. However, these students number fewer than those who entered with this attitude. In comparison with the shifts among students at other types of colleges, this shift away from the Church is

weakest on Catholic campuses. Although Catholic students on Catholic campuses moved closer to the Church in their agreement about the abolition of the death penalty, a minority of Catholic students take this position in the junior-year survey. Again, the Catholic campus environment appears to provide the most favorable results overall for the Church in these survey estimates.

Social Justice Issues

Catholic students at Catholic colleges and universities were more likely than Catholics at other types of colleges and universities to move toward the Church's teachings on general statements of social justice—reducing pain and suffering in the world and improving the human condition (see Table 2). About 1 in 5 or more Catholics attending Catholic colleges and universities moved closer in agreement with the Church during college on these two statements.

As juniors, 75% of Catholic students at Catholic colleges agreed that reducing pain and suffering in the world was either very important or essential. Seventy-two percent responded similarly to the goal of improving the human condition.

Although Catholic students at Catholic colleges and universities moved closer to the Church on tax policy—specifically wealthy people paying a larger share than they do now—the percentage point increase for these students lags behind Catholics attending private nonsectarian colleges (net change of 8 percentage points compared with 14 percentage points).

In the junior-year survey, 58% of Catholics attending Catholic colleges agreed somewhat or strongly that the wealthy should pay higher taxes. More Catholics on other campuses were more likely to agree with this policy statement than those attending Catholic colleges. This may be related to the overall higher income levels of the families of students at Catholic colleges and universities. Agreement with this statement, in many cases, may be acceptance of one's family paying more in taxes.

Catholics moved away from the Church on the issue of affirmative action in college. However, the question is specific to the abolition of this policy for college admissions. As shown in the descriptive results of Table 2, the shift among those at Catholic colleges is similar to those attending at public and private religious non-Catholic campuses.

In absolute terms, only 43% of Catholic students at Catholic colleges and universities disagreed somewhat or strongly that affirmative action in college admissions should be abolished.

Table 2

Attitudinal Changes of Catholic Students on Social Justice Issues by Type of College

	Away from the Church (%)	Unchanged (%)	Toward the Church (%)	Net Change
Reducing pain and suffering				
Catholic	15	47	38	+23
Public	18	42	40	+22
Private religious non-Catholic	18	48	35	+17
Private nonsectarian	21	38	41	+20
Improving the human condition				
Catholic	19	44	37	+18
Public	22	39	39	+17
Private religious non-Catholic	26	4	27	+1
Private nonsectarian	29	44	27	-2
Increasing taxes for the wealthy				
Catholic	22	47	30	+8
Public	24	46	31	+7
Private religious non-Catholic	23	49	28	+5
Private nonsectarian	20	46	34	+14
Affirmative action				
Catholic	29	46	25	-4
Public	29	50	21	-8
Private religious non-Catholic	32	43	26	-6
Private nonsectarian	24	49	27	+3

Weapons and War Issues

Catholics at Catholic colleges and universities, like Catholics on most other types of campuses, moved toward the Church's teachings and positions on reducing the availability of weapons on a small and large scale (see Table 3). Most left college agreeing with the Church on these issues. Thirty-seven percent of Catholics on Catholic campuses moved closer to the Church in

Table 3

Attitudinal Changes of Catholic Students on Weapons and War Issues by Type of College

	Away from the Church (%)	Unchanged (%)	Toward the Church (%)	Net Change
Military spending				
Catholic	17	46	37	+20
Public	23	45	32	+9
Private religious non-Catholic	18	45	37	+19
Private nonsectarian	12	45	43	+31
Gun control				
Catholic	20	55	25	+5
Public	20	50	30	+10
Private religious non-Catholic	20	53	27	+7
Private nonsectarian	26	53	21	-5

disagreeing that federal military spending should be increased. This represents a 20 percentage point positive shift after accounting for the 17% who moved away from the Church on this issue.

In their junior year, 72% of Catholics at Catholic colleges and universities disagreed somewhat or strongly that military spending should increase.

Twenty-five percent of Catholics on Catholic campuses moved closer to the Church in agreeing that the federal government should do more to control the sale of handguns. This represents a 5 percentage point positive shift after accounting for the 20% who moved away from the Church on this issue.

In their junior year, 88% of Catholics at Catholic colleges and universities agreed somewhat or strongly that the government should do more on this issue.

Same-Sex Marriage

On no other issue did Catholics move further from the Church—regardless of the type of college they attended—than on same-sex marriage (see Table 4). Only 16% of Catholics on Catholic campuses moved closer to the Church in disagreeing that same-sex couples should have the right to legal marital sta-

Table 4

Attitudinal Changes of Catholic Students on Same-Sex Marriage by Type of College

	Away from the Church (%)	Unchanged (%)	Toward the Church (%)	Net Change
Catholic	39	45	16	-23
Public	42	43	15	-27
Private religious non-Catholic	36	50	14	-22
Private nonsectarian	42	44	14	-28

tus. Accounting for the 39% who moved away from the Church on this issue, there was a net shift of 23 percentage points away from the Church teaching.

In their junior year, only 1 in 3 Catholics (32%) at Catholic colleges and universities disagreed somewhat or strongly that same-sex couples should have the right to marry. Catholics on other campuses are slightly less likely to disagree with this. This issue, more than any other, may be strongly affected by the Millennial Generation's post-materialist point of view regarding marriage and sexuality.

Religious Behavior

Catholics were significantly less likely to attend religious services in college regularly (as reported in the junior-year survey) than in the 12 months prior to when they initially took the survey as freshmen. This shift likely represents their departure from their parents' level of Mass attendance. Indeed, a decrease in frequency of Mass attendance was least likely among Catholics attending a Catholic college or university if they indicated that they were living with family during the fall semester of their freshman year. Thirty-two percent of Catholics at Catholic colleges and universities decreased their frequency of Mass attendance while in college, whereas 61% attended as frequently as they had before college, and only 7% increased their attendance (see Table 5). This represents a net shift of 25 percentage points away from pre-college attendance levels.

As juniors, 42% of Catholics at Catholic colleges and universities said they attended religious services frequently while in college. This attendance rate was higher than Catholics at any other type of campus by more than 10 percentage points. It was also the case that fewer Catholics reported a decline

in their attendance on Catholic campuses while in college than Catholics at any other type of college.

Changes in Catholic students' prayer activity and reading of sacred texts or about religion or spirituality was not as negatively affected. Although 29% of Catholic students at Catholic colleges said they prayed less often as juniors than they did as freshman, 26% reported an increase in prayer frequency (45% were unchanged). In their junior year, 31% of those on Catholic campuses prayed daily and 48% prayed less than daily but at least once a week. More Catholic students at all other types of colleges had a less active prayer life as juniors than as freshmen and were less likely than Catholics on Catholic campuses to pray at least once a week. Catholics at Catholic colleges and universities were less likely than Catholics at other types of colleges to decrease their reading of sacred texts or other reading about religion and spirituality in college. As juniors, 38% of Catholics on Catholic campuses read sacred texts at least once a month and 31% read other material on religion or spirituality with this frequency. This frequency of reading was higher than that of Catholics at any other type of college, including private religious non-Catholic colleges.

Multivariate Multilevel Regressions

Table 6 presents the coefficient estimates from 26 regression models for the effect of enrollment at a Catholic college. Each row in the table represents a different dependent variable. The first column includes the Catholic college coefficients for the baseline results. These estimations included only the variables for college type (e.g., Catholic, private nonsectarian, and private religious non-Catholic, with public used as the excluded reference category). The second column includes results for estimations with a full set of control variables, including sex, high school type, choice rank of college, attraction to college due to its religious affiliation/orientation, high school grade point average, and parental income. Estimates for control variables have been omitted due to space limitations. A positive coefficient represents movement toward the Church's position or norm and a negative coefficient represents movement away from the Church.

In the baseline models, the positive and statistically significant coefficients for Mass attendance, reading about religion and spirituality, and the importance of improving the human condition are all indicative of a potential positive Catholic college effect. Each is statistically significant at the .05 level and their direction represents the fact that Catholic students at Catholic colleges and universities are more likely to move toward the Church in college

Table 5

Religious Behavior Changes of Catholic Students by Type of College

	Less Active (%)	Unchanged (%)	More Active (%)	Net Change
Mass attendance				
Catholic	32	61	7	-25
Public	42	50	8	-34
Private religious non-Catholic	51	44	4	-47
Private nonsectarian	49	45	7	-42
Prayer				
Catholic	29	45	26	-3
Public	34	42	23	-11
Private religious non-Catholic	31	45	23	-8
Private nonsectarian	40	38	21	-19
Reading sacred texts				
Catholic	28	42	30	+2
Public	33	49	18	-15
Private religious non-Catholic	32	39	29	-3
Private nonsectarian	32	44	24	-8
Reading religion & spirituality				
Catholic	29	40	21	-8
Public	34	47	19	-15
Private religious non-Catholic	39	38	23	-16
Private nonsectarian	30	49	21	-9

than Catholics who attend a public university or college. The coefficient for affirmative action in college admissions is also statistically significant, yet in a direction indicating movement away from the Church's position. This is the only issue or behavior in any of the regression models for which a negative and statistically significant effect was identified. If we consider statistical significance at the .10 level, Catholic colleges and universities also emerge as

Table 6

Estimated Effects of Catholic College Enrollment on Catholic Students

	College Type Only	College Type with Individual-Level Control Variables
<i>Frequency of Religious Behaviors</i> (+ more frequent, - less frequent)		
Mass attendance	.143**	.102
Prayer	.168*	-.038
Reading sacred texts	.139*	.141
Reading about religion & spirituality	.179**	.097
<i>Social and Political Issue Attitudes</i> (+ closer to Church, - away from Church)		
Oppose abortion	.107	.111
Oppose death penalty	-.004	.008
Important to reduce pain and suffering	.066	.131
Important to improve human condition	.149**	.075
Support more taxes for wealthy	.028	.109
Support affirmative action in college admissions	-.147**	-.158*
Support gun control	-.018	-.035
Oppose increase in military spending	-.055	-.144
Oppose same-sex marriage	-.001	.046

Note. * $p < .10$, ** $p < .05$. Table entries are coefficient estimates of the fixed effect of attendance at a Catholic college or university. Estimation methods are SPSS mixed-level models; control variables include: sex, age, high school type, choice rank of college, attraction to college due to its religious affiliation/orientation, high school GPA, use of college loans, and parental income. Estimates for control variables in the 26 regression models are not shown due to space limitations. Excluded category for college type (reference) is public college/university. Model includes only those respondents who self-identified as Catholic as freshmen and juniors.

being influential, *ceteris paribus*, in promoting increased frequency of prayer and of reading sacred texts.

The second model includes results for models including the control variables, which in part provide adjustment for self-selection—that students do not randomly select their colleges and those Catholics who enroll at a Catholic college are different from those who enroll in another type of college or university. These control variables render the Catholic college effect neutral in

all cases with the exception of affirmative action, where the result remains negative yet only marginally significant.

Conclusion

By broadening the set of outcomes measured and providing for more rigorous analyses of HERI data, our results question the Cardinal Newman Society's conclusion regarding the negative impact of Catholic colleges. These negative effects have been overstated. Catholic colleges and universities appear to be doing no harm—certainly in comparison to other types of higher education institutions—and at a more subtle level may be increasing their student's Catholicity. However, it is not possible statistically to disentangle these positive effects from potential self-selection issues.

It may be possible in future research to isolate the statistically robust effects of Catholic higher education by using a broader sample of Catholic colleges and universities. Like the Cardinal Newman Society study, this research has been based on surveys of students at less than 1 in 7 Catholic colleges and universities. Due to confidentiality guarantees made by HERI, we are also unable to know which Catholic colleges and universities were included. It is possible that there may be differences between different subgroups of Catholic colleges and universities as well.

Yet even with the data limitations of this study we can conclude that we have not found any evidence, short of movement away from the Church teachings regarding affirmative action in college admissions, that Catholic colleges and universities are systematically making students "less Catholic." Also, other results of the CSBV survey not included in the analysis above indicate more broadly that students self-identifying as Catholic at Catholic colleges and universities remain profoundly connected to their faith in their junior year. For example, 93% believed in God while 6% expressed some doubt (i.e., not sure). Only 10% said their current views about religious matters include doubting. Eighty-seven percent said that seeking to follow religious teachings in everyday life was at least somewhat important to them (50% said this was either very important or essential). Eighty-two percent reported that they discuss religion and spirituality with their friends occasionally or frequently, 63% reported that they discuss religion and spirituality occasionally or frequently with their college professors, and only 6% indicated that they have frequently experienced conflict between their college coursework and their religious beliefs (30% say this has occurred occasionally). Forty-six percent said their "religiousness" became stronger or much stronger during college and 39% stated there was no change in this (thus, only 14%

indicated this became weaker or much weaker). Forty-two percent rated their religiousness as above average or among the highest 10 percent, and 39% said this is average (thus, only 18% said their religiousness is below average or among the lowest 10 percent).

Thus, in sum, the results do not indicate any significant secularizing trend among Catholic students attending Catholic colleges as is often expressed in the criticism of these institutions.

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Mark M. Gray is a research associate professor at Georgetown University and a senior research associate of the Center for Applied Research in the Apostolate (CARA). Melissa A. Cidade is a research associate of the Center for Applied Research in the Apostolate (CARA). Correspondence concerning this article should be sent to Dr. Mark M. Gray. E-mail: mmg34@georgetown.edu