

RUNNING HEAD: How College Students Interpret Moral Issues and Experiences

How College Students Interpret Moral Issues and Experiences:

A Mixed Methods Study

Nathan K. Lindsay

Cassie Barnhardt

Julie E. DeGraw

Patricia M. King

University of Michigan

Marcia Baxter Magolda

Miami University (Ohio)

Paper presented at the

American Educational Research Association National Meeting

April 10, 2007

Chicago, IL

The authors gratefully acknowledge the support of the Center of Inquiry in the Liberal Arts at Wabash College for its support of this project.

Abstract

Facilitating students' development in moral reasoning is an important and well-documented goal in American higher education. This study explored this educational outcome through a mixed method analysis of findings from the Wabash National Study of Liberal Arts Education, focusing on factors that affect the development of moral reasoning and on how students made meaning of their moral experiences. Several factors were found to predict moral reasoning, including gender, ability, and several attitudes and values. Further, meaning making orientation was found to have strong explanatory power for understanding differences in moral reasoning. By understanding the predictors of higher moral reasoning, as well as how students make meaning of the moral dilemmas they face in college, educators can better prepare students to respond to such challenges in the future.

Nancy Thomas has written extensively on the goals of liberal education as the foundation for the development of responsible citizenship. She states:

Graduates of a liberal education need to be people of integrity possessed of a sense of responsibility to society. These qualities require a sense of humanity as well as a commitment to the common good with a conviction that there is something more important than oneself. (2002, p. 30)

However, even some college seniors describe moral experiences in their lives in terms that do not support nor enable them to act in ways that show the kind of responsibility to society Thomas noted:

I hate to say I have bad morals. I just have a sense of not caring [about] things that I don't think are important . . . I'd like to think I have very good morals but unfortunately, I selectively apply my morals, whereas other people try to be way too good people. I don't think the world's a good place, so I don't think you can be a good person all the time. You have to just let some things slide because if you were worried about everything, everything's so terrible you'd just be depressed your entire life, and you don't have the power to do anything about it.  
(Senior student)

This sentiment, expressed by a male participant in the Wabash National Study of Liberal Arts Education, reveals the challenges higher education faces in preparing graduates for responsible citizenship. Thomas' thoughts are representative of a growing perspective in higher education, although promoting character and moral development has been a goal of collegiate education in the United States since its inception (Reuben, 1996). Over the last decade, there have been many calls for college educators to invest more fully and more effectively in moral and civic education

(AACU, 2002; Barber, 1998; Colby, Ehrlich, Beaumont, Rosner & Stephens, 2000; Ehrlich, 2000; Higher Education Act of 1998; NASULGC, 1997). In two comprehensive reviews of moral development among college students, both King and Mayhew (2004) and Pascarella and Terenzini (2005) concluded that success in promoting moral development has been uneven, and that scholars are only beginning to understand the interaction of the diverse array of factors that contribute to moral reasoning in particular and moral functioning in general. Higher education's capacity for producing college graduates that can fulfill the promise of liberal education as described by Thomas hinges on educators' abilities to understand and influence student development, including moral reasoning and other aspects of development. This study attempts to investigate students' moral development by drawing upon the theories of moral development and self-authorship; each is discussed in detail below.

Our examination of moral development emerges from the Wabash National Study of Liberal Arts Education (WNSLAE), a project that examines the conditions and practices that promote the achievement of liberal arts outcomes, one of which is moral character (see WNSLAE, 2006 and King, Kendall Brown, Lindsay, & VanHecke, 2007).<sup>1</sup> The purpose of this study was to examine factors that affect students' reasoning about moral issues and experiences, using both quantitative and qualitative methods to assess moral reasoning. It is our contention that a better understanding of how college students make moral decisions has the potential to provide educators essential information and insights regarding the developmental mechanisms that prepare students for their ethical responsibilities, both as citizens within their campus communities and to society.

---

<sup>1</sup> The seven liberal arts outcomes of the WNSLAE project are: (1) effective reasoning and problem solving, (2) intercultural maturity, (3) integration of learning, (4) moral reasoning and behavior, (5) well-being, (6) leadership, and (7) inclination to inquire and lifelong learning (NSLAE, 2003).

### *Background Literature on Moral Development and Self-Authorship*

To provide background information on how students develop morally, several major theories that have contributed to the study of moral development and self-authorship will be examined. This literature review consists of three primary sections: 1) a review of the basic steps in the development of morality as described in major theories of moral development; 2) a brief overview of predictors of moral development that have been tested in prior research; and 3) an examination of self-authorship theory as a tool for understanding the moral development of students.

#### *Moral Development Theory*

*Ethic of justice.* Kohlberg (1969, 1981, and 1984) provides insight into moral development outcomes for students by focusing on how individuals progress to the point of using moral principles as the basis for making moral decisions, giving priority to principles of justice rather than other criteria (such as decision rules that are self-serving or that give an unfair advantage to some over others). This theory has come to be known as an example of an *ethic of justice* model. Using a semi-structured interview format and longitudinal data, Kohlberg created a model of moral development consisting of six cognitive developmental stages that extend through three levels—preconventional, conventional, and postconventional. In the preconventional level, individuals make moral decisions based on their individual needs and are motivated by punishment (stage one) and reward (stage two). Reasoning at the conventional level, individuals make moral decisions based on the rules and laws of society, with the primary concern being the good of those in immediate circles of acquaintance. Individuals who reason using a principled (postconventional) approach are concerned with equality and justice for all segments of society and make moral decisions based on “conscience in accord with ethical

principles that appeal to comprehensiveness, universality, and consistency” (Rich and DeVitis, 1994, p. 86). Based on his cross-cultural research, Kohlberg concluded that his theory of moral development reflected universal conceptions of justice and liberty, and that these function as filters in making moral decisions.

*An ethic of care.* Responding to a perceived bias against women in Kohlberg’s work and wishing to examine differing paths of moral development, Carol Gilligan (1982) developed an alternative model of moral development. It was based on the assumption that relationships are central to women’s moral experience, and emphasized contextual relativism rather than transcendent, universal principles as a means of engaging with moral dilemmas. Gilligan’s three levels of moral development involve an initial focus on individual survival, transitioning to responsibility for others and the notion of goodness as self-sacrifice, and finally a concern for truth as well as goodness and the adoption of the morality of nonviolence (Gilligan, 1982). The caring and contextual orientations central to Gilligan’s conceptualization of morality (her model focused on the private realm of the home rather than the public realm) reflect the connected and integrated understanding that an individual must have to behave morally; thus, moral development hinges on one’s capacity for balancing individual emotions, relationships to others, ideas of goodness, and active interpretations of the context or consequence of a particular situation.

Although Gilligan’s theory opened new avenues of thought on moral development, early womanist theorists presented a very different ethic of care for African-American women (Cannon, 1988; Collins, 1990; hooks, 1984). Thompson (1998) critiqued the dominant ethic of care literature in an article titled, “Not for the Color Purple: Black Feminist Lessons for Education Caring.” She began her critique by detailing how the ethic of care literature assumes

the white feminist perspective and does not consider alternative ideas of what counts as caring. She then discussed the “leftist critiques” of caring theories’ “ahistoricism, cultural bias, and obliviousness to systemic power relations” (p. 4). And lastly, she deconstructed how the ethic of care researchers and literature have not examined their own racial attitudes and perspectives and how this may have affected their research conclusions, which thus may not be universally applicable. Thompson calls on white researchers to create new paradigms and not continue to try to fit the Black woman’s experience into previously constructed theories.

*Ethic of care and justice.* Nel Noddings’ (1984, 1988, 1989, 1992, 1999) further developed the scholarly understanding of moral development by suggesting ways in which individuals can value care *and* justice in moral development. Noddings (1995) suggested that “ethical caring” guides the actions of moral actors. Ethical caring puts relationship at the center of moral character and demands action that establishes, restores, or enhances the kinds of relations in which caring ideally occurs according to desire or inclination. Siddle-Walker and Snarey (2004) contributed to the concept of seeking care *and* justice by suggesting a model of African American moral development which calls for a synthesis of many of the dichotomies found in traditional moral development literature.

Additional theorizing about moral development has focused on developing more holistic descriptions of factors affecting moral development such as those that integrate personality, cognition, and identity into moral functioning (Higgins-D’Alessandro, 2006; Tappan, 2006; Walker, 2006) and those that examine multiple dimension of morality, such as Rest’s (1984) four-component model of morality (Rest, 1984; Rest, Narvaez, Bebeau, & Thoma, 1999). Other researchers have focused on the need to examine moral development in naturalistic settings (Livingstone, Derryberry, King, & Vendetti, 2006; Tappan, 2006; West, Pickard Ravenscroft &

Shrader, 2004) in order to better understand the complex interrelationships between motivation, action, sensitivity, cognition, and judgment.

*Summary.* Mapping the evolution of moral development is a topic that has engaged serious scholars for many decades. One major advance in scholarly work over the last three decades is that our theoretical resources for understanding development in this domain are rich and growing, and there is now a large body of research on which to draw when attempting to understand moral development. We turn next to a portion of this research.

#### *Predictors of Moral Development among College Students*

In order to better understand the factors that affect moral development among college students, we examined the prior research indicating how college students' specific characteristics, collegiate conditions, and experiences have been found to affect moral development. Much of this research has been done utilizing the Defining Issues Test (DIT; Rest, 1979; Rest, Thoma, Edwards, 1997). There is a robust body of research investigating moral reasoning using the DIT and consequently, researchers have developed much stronger evidence base for moral reasoning than on other aspects of moral development. Further, since the DIT uses a recognition task (where respondents choose from among predetermined responses) rather than a production task (where respondents create their own responses), there is stronger evidence regarding how students' assess given moral reasoning options than how they construct the options for themselves. Unfortunately, the body of research based on Kohlberg's Moral Judgment Interview (Colby & Kohlberg, 1987) is not nearly as extensive as that for the DIT, and much less is known about college student moral reasoning using an interview format. (For a discussion of these two kinds of tasks and their implications for developmental assessment, see King, 1990.)



King and Mayhew (2002) conducted a comprehensive analysis of studies evaluating college students' moral development as measured by the DIT and found multiple studies that linked moral growth with exposure to diversity and social justice courses. They also observed a trend in the research findings suggesting that interactions with diverse peers contributed to awareness and understanding of broader social perspectives and thus to moral development among college students. Endicott, Bock, and Narvaez (2003) found positive correlations between more advanced stages of moral reasoning and positive views of intercultural understanding as assessed by the Intercultural Development Inventory (Hammer & Bennett, 2005). Derryberry and Thoma (2000) also found positive associations between moral growth and comfort with diversity.

Concerning student characteristics that affect moral development, two recent research reviews (King & Mayhew, 2004; Pascarella & Terenzini, 2005) indicate that gender where gender differences are found, female college students tend to score higher on measures of moral reasoning. In addition, although few studies have examined race, most did not produce any distinguishable effects of race on moral development (King & Mayhew, 2004). Educational ability and level have both been found to be positively related to moral development (Bebeau & Thoma, 2003).

Prior studies using the DIT point to several background characteristics as predictors of moral reasoning; these include gender, perspectives on diversity, and educational level and ability. We now examine self-authorship theory and the possibilities it offers for understanding how students construct and interpret moral issues.

*Self-Authorship*

In addition to research on moral development, this paper draws on self-authorship research to understand and organize information about how college students frame and interpret moral issues and experiences. The term “self-authorship” was coined by Kegan (1994) in his multi-dimensional model of adult development. He traces the development of “evolution of consciousness, the personal unfolding of ways of organizing experience that are not simply replaced as we grow but subsumed into more complex systems of mind” (p. 9). Each system is comprised of elements from cognitive, intrapersonal and interpersonal dimensions. The mature capacity captured by the concept of self-authorship is built on cognitive complexity, a definition of self that is internally rather than externally grounded, and an ability to construct relationships that take into account one’s own and others’ needs. Taken together, these dimensions help individuals develop the capacity to use their knowledge and apply their skills in a variety of settings.

The *cognitive* dimension focuses on how individuals understand the basis of their beliefs. In order of complexity, this basis might be what they’ve been told to believe (externally oriented), known facts about the issue at hand (a mixture of externally and internally oriented basis of beliefs), or evaluation of evidence that is acknowledged to be imperfect (internally oriented). The *intrapersonal* dimension focuses on an individual’s sense of self and values that reflect one’s identity. Again, by general level of development, an individual might describe himself by reference to what others say about him (external), feeling torn between the wishes of the peer group and one’s own sense of propriety (a mixture of external and internal), and being guided by an internal compass that reflects one’s examined values (internally oriented). The *interpersonal* dimension focuses on the ways one constructs one’s relationships with others.

Externally oriented individuals have dependent relationships, acting as others have instructed them or simply avoiding contact with those who are different. Those who demonstrate a mix of external and internal orientation sometimes act to acquire others' approval and sometimes act on their own values. Internally oriented individuals have the capacity for mutuality and interdependence, navigating potential conflicts in ways that are both true to self and true to the others. We do not mean to imply here that the continuum of development of self-authorship from external to internal maps a journey of increasing individualism; rather, it shows how the basis for beliefs, understanding of self, and ways of relating to others continually takes contextual information into account, but does so in a way that moves from a unidimensional to a multidimensional world view, is increasingly internally rather than externally driven, and personally affirmed rather than a simple acquiescence to others' suggestions (or demands). With self-authorship comes the capacity to construct a foundation of ways of thinking, being, and relating to others that guides students' understanding and actions; this capacity is quite consistent with the broader goals of liberal arts education (e.g., Thomas, 2002; Palmer, 2002).

King and Baxter Magolda (2005) noted that although intercultural maturity is a desired collegiate outcome and that many institutions have developed educational programs to promote its development, the results are mixed. They suggest that a deep understanding of intercultural issues and the capacity to act in interculturally mature ways requires self-authorship. Similarly, Creamer and Laughlin (2005) have suggested that low persistence rates of women in STEM fields may be explained by their use of external orientations to make decisions related to choosing a major and a career.

*Summary.* As described by Kegan, students' ability to demonstrate self-authorship depends upon their development in the cognitive, intrapersonal, and interpersonal domains.

Because each level of meaning making reflects a cluster of assumptions about knowledge, self, and how one relates to others, development in meaning making toward self-authorship plays a significant role in helping students develop the capacity to successfully meet the goals of a 21<sup>st</sup> century education (Baxter Magolda, 2004) and achieve several collegiate outcomes (King, 2007; King, Kendall Brown, Lindsay, & VanHecke, in press).

Moral development and self-authorship appear to be reciprocal and complementary developmental processes, but this has not been confirmed through research. Although these frameworks have been conceptualized and articulated in different ways, each describes what appear to be mutually reinforcing patterns of thinking and being. For example, in their most advanced developmental forms, each model leads to actions that are well-reasoned and respectful of how one's actions affect others as well as oneself. This study attempts to expand on the existing body of scholarly literature by examining the intersection of self-authorship and moral character in college students.

### *Method*

The data for this paper were taken from the pilot phase of the Wabash National Study of Liberal Arts Education (WNSLAE), which is a cross-sectional, multi-method study designed to understand the conditions and experiences that facilitate the acquisition of seven liberal arts outcomes. Students from four institutions participated in this study; these institutions included a southeastern regional comprehensive institution, as well as three Midwestern institutions—a large research university, a liberal arts college, and a community college. Due to an agreement with the institutions that precludes reporting the results by institutional type, data are aggregated across institutions for this study.

*Sample*

A total of 2400 students from the four institutions were invited to participate in the study, with a target response rate of 800 participants. Of these, 907 students registered for the study, and 723 completed a 45-item questionnaire based on three conceptual groupings: background characteristics, students' personal views, and collegiate experiences (the WNSLAE Student Experiences Survey). Two randomly selected sub-samples were drawn from this group of 723 to complete one of two batteries of outcomes assessment instruments, one of which included the Defining Issues Test-2; useable DIT2 scores were obtained from 316 students.

A total of 600 students completed the assessment portion of the data collection. From this group of 600, 174 students also completed individual interviews. All respondents received financial compensation for their participation. The sample of students that completed the WNSLAE Student Experiences Survey and the Defining Issues Test-2 (DIT2) was 63% female (N=316), compared to the rest of the sample that did not complete the DIT2, which was 70% female (N=407), ( $p < .05$ ). Among the specific sub-sample used in this study (the 316 students for whom we have useable DIT2 scores), 96 also participated in the WNSLAE Interview (described below). Within this group of DIT respondents who also participated in the interview, there were no significant differences on any variable used in this analysis between the interviewed and non-interviewed students (see Table 1 for a listing of means).

*The Defining Issues Test (DIT).* The Defining Issues Test (DIT2; Rest, Thoma, and Edwards, 1997) was used to measure students' moral reasoning. Developed in 1997, the DIT2 was designed as a revision to the original DIT survey to update the language, shorten the form, and subsequently improve respondent usability. Thus, it is relatively new, and thus does not yet have a comparable body of evidence as is available for the DIT. Bebeau and Thoma (2003)

reported that the DIT2 has a .79 correlation with the DIT; they also reported a comparable test-retest reliability in this manual.

Both versions of the DIT ask respondents to select among a list of possible responses to a moral dilemma and rank order those that are most similar to the respondent's way of thinking about the problem. The rationale for this approach is that respondents make their selections in ways that reveal their underlying schema for reasoning about moral problems (Bebeau, Rest, & Narvaez, 1999; Rest, Narvaez, Bebeau, & Thoma, 1999). The three major schema reflected in the DIT responses to determine questions of fairness are: acting in ways that are in one's personal self interest; maintaining social norms; and using moral principles to decide moral issues. Each level shows an increasingly inclusive frame of reference, moving from a focus on individual benefits to a way of framing moral problems that take into account broader spheres of influence and impact.

An important feature of the DIT2 is its improved scoring capacity over the DIT that allows for larger samples and the addition of the N2 score, a composite measure that Bebeau and Thoma (2003) argued was the "most valid single score" (p.7). The N2 score is sensitive to detecting the degree to which an individual reasons in a principled way or exhibits post-conventional moral thinking; additionally, this score accounts for the extent to which an individual rejects lower stage reasoning schemes in particular personal self-interest when reasoning (Rest, Narvaez, Thoma & Bebeau, 1999). Based on its usefulness, we selected the N2 score as the outcome variable in our quantitative model.

*The WNSLAE Interview.* A total of 174 students (97 first-year students, 17 sophomores, and 60 seniors) participated in the WNSLAE Interview. This is an individual 60-90 minute interview that is conducted using an approach that incorporated both the "informal conversation interview"

and the general “interview guide” (Patton, 1990, p. 288). Trained interviewers followed a three-part, semi-structured interview protocol (Baxter Magolda & King, 2006) that asked students about their personal history and expectations for college, which educational experiences were important to them and why, and how students integrated their learning across experiences. One of the available prompts in the interview invited students to discuss being in a situation where they struggled with doing the right thing. Interviews were digitally recorded and transcribed verbatim. For a full description of the interview, see Baxter Magolda & King (in press).

### *Analytical Procedures*

*Quantitative analyses.* Our model for evaluating factors affecting moral judgment was informed by the previous scholarship employing the DIT and DIT2, taking into account students’ personal characteristics, attitudes, and experiences that have been associated with moral reasoning. Specifically, we selected gender, race, pre-college academic ability (a composite standardized measure of high school GPA and ACT or SAT score), and class year (categorical 4 level item indicating first-year, sophomore, junior, senior), as our demographic independent variables.

Our selection of additional independent variables drew upon previous research. Specifically, we included a cluster of variables examining the extent to which students value and enjoy encountering diverse perspectives and people, whether socially or in their courses. Our last grouping of independent variables was informed by recent research on moral development; this grouping included variables that measured attitudes about students’ goals for their adult lives, such as the importance of helping others in difficulty, developing a meaningful philosophy of life, being successful in one’s own business, and making a lot of money. All of these diversity variables were self-reported, and measured on a 1 to 5 Likert scale indicating the degree to which

the student agreed with the statement (a higher score indicated stronger agreement). For the attitude variables, students ranked the level of importance they ascribed to fulfilling each of the goal statements (also ranked on a Likert type scale, ranging from 1: “Not Important” to 4: “Essential”).

*Bivariate analyses.* In order to evaluate whether there were any substantive differences on the N2 score, we performed a one-way ANOVA with contrasts to consider the differences across class year. We also used *t*-tests to consider whether there were any differences between N2 scores by class year, gender, and race.

*Multivariate analyses.* Using the DIT2 N2 score as the dependent variable, we employed a four block ordinary least squares regression model entered as the following conceptual clusters: Block 1: students’ background characteristics—gender (dummy coded for female), race (dummy coded for minority), and pre-college academic ability; Block 2: class year; Block 3: valuing diverse people and experiences during college (i.e., valuing different perspectives, enjoying courses with different perspectives, and valuing contact with diverse people); and Block 4: attitudes (i.e., the importance of helping others in difficulty, developing a meaningful philosophy of life, being successful in one’s own business, and making a lot of money).

*Qualitative analysis.* We analyzed the interview transcripts in several phases. We first wrote a three-part summary that included the following: the student’s relevant background characteristics and an overview of the interview; evidence of the student’s meaning making orientation; and descriptions of experiences that promoted students’ development (that is, experiences resulting in positive changes in ways of seeing the world, self, and their social relations); we called these “developmentally effective experiences.” Verbatim quotes accompanied the assessment of meaning making levels and developmentally effective



experiences. For purposes of this study, we used only the student background characteristics and the assessment of meaning making levels from the summaries. (For a complete description of the analysis process, see Baxter Magolda, King, Stephenson, Kendall Brown, Lindsay, Barber, & Barnhardt, 2007). We then combined data across institutions and sorted the transcript summaries into three groups based on self-authorship level; the groups were: those where students used a predominantly external orientation to meaning making; those where the students used a combination of external and internal orientations; and those where students used a predominantly internal orientation. Third, we reviewed the summaries looking for experiences reported by the students that had a moral dimension, such as examples in which they reported having to make a judgment about what was the right thing to do in a given situation. We focused specifically on the information-rich cases, or those that provided rich illustrations of the phenomenon of interest (Patton, 1990), and identified 45 examples for this purpose. Last, we organized these examples according to the predominant developmental level evidenced in the transcript to map and compare effects across developmental levels.

*Mixed-method analysis.* In order to examine self-authorship (as assessed through the interviews) as a foundation for moral reasoning (as assessed using the DIT2), we first performed a one-way ANOVA with contrasts on the DIT *N2* scores by meaning making orientations. To do so, we used the three developmentally ordered categories that were used in the in the qualitative analysis; these categories corresponded to patterns in students' responses that reflected their meaning making orientations. The patterns were: external orientation to meaning making (1), a mixture of external and internal orientations to meaning making (2), and internal orientation to meaning making (3). An internal orientation reflects the achievement of a self-authorship perspective; the other orientations reflect steps leading to this perspective. The mean was

$M=1.34$ ,  $SD=.61$ ; the ANOVA compared each meaning making orientation to the other two orientations: external contrasted with combined and internal; combined contrasted with internal and external; and internal contrasted with internal and combined.

### *Results*

#### *Moral Judgment*

*Bivariate results.* The distribution of N2 scores by class, gender, race, and meaning making orientations is given in Table 2. Significant differences in N2 scores by class level and gender were found in this sample. Women scored significantly higher than men ( $p < .05$ ), and the first-year and sophomore students' scores differed from each other and from the upper class students, with a steady upward progression of N2 scores by class level. The junior and senior students did not differ from one another. There were no significant differences by race.

The comparison of students' N2 scores by meaning making orientations revealed substantive differences across orientations: students at each successive level of meaning making earned substantially higher N2 scores (at least 10 points) than their counterparts at the earlier level: those who used external orientations had the lowest N2 scores, followed by those who used a mixture of orientations. And although the internal orientation group was too small to yield scores that could be used for meaningful analysis, it is noteworthy that their average score was again ten points higher than the mean for the group that used a mixture of orientations.

*Multivariate results.* The overall main effect of background characteristics, class year, valuing of diverse views and people, and students' personal goals on moral reasoning was  $R^2 = 0.282$ ,  $p < .001$ . (See Table 3 for complete details.) Each block of the hierarchical regression was substantial, meaning that with the addition of each conceptual cluster of independent variables, more of the variance in moral reasoning was explained. Students' background characteristics

accounted for 15.3% of the variance in N2 scores, with class year contributing a change of  $R^2_{\Delta} = .014$  ( $p \leq .05$ ), totaling 16.6% of the variance explained. Valuing diverse people and experiences contributed a change of  $R^2_{\Delta} = .054$  ( $p \leq .001$ ), totaling 22% of the variance explained. Last, adding students' goals resulted in a change of  $R^2_{\Delta} = .062$  ( $p \leq .001$ ), completing the model with 28.2% of the variance in N2 scores explained by this array of factors.

With respect to the specific importance of predictors, pre-college academic ability had the most substantive influence on students' moral reasoning, with an effect size of  $\beta=0.27$  ( $p < .001$ ). Minority status was insignificant; however, gender (being female) was a strong positive predictor of students' N2 scores ( $\beta=0.17$ ,  $p < .001$ , full model). The extent to which students valued diverse people and experiences proved significant in predicting moral judgment level in block three, but the effect of these values was substantially diminished with the addition of students' attitudes in Block 4 of the final model. That is, the coefficients for both "values diverse perspectives" and "values contact with diverse people" became nonsignificant, and the effect sizes diminished after controlling for attitudes (including the degree to which students assigned value to the importance of "helping others in difficulty," "developing a meaningful philosophy of life," and "success in one's own business" in Block 4). Students' personal, individual attitudes towards life (as measured in Block 4) had a more pronounced effect on their N2 moral development scores than their perspectives about diversity.

The regression also yielded a negative effect: the more likely students viewed helping others in difficulty as an important goal in life, the more likely they were to exhibit a lower moral reasoning score ( $\beta=-0.15$ ,  $p < .01$ ). The reasons for this negative relationship with the altruistic act of helping others are not intuitively apparent. However, the "importance of success in one's own business") may also reflect the goal of making a lot of money, and thus represent an

instrumental goal for which treating others fairly might interfere. The attitude variable with a positive relationship to the N2 score (“importance of developing meaningful philosophy of life”) can be construed as an assessment of one’s internal values, including the role of moral values in one’s life. These results that show the negative and positive relationships to the N2 score might reflect the sensitivity of the N2 measure in the DIT2 that it is more likely to detect when students are rejecting lower stage reasoning (in this case maintaining norms for financial success) and more strongly embracing moral principles (by valuing the search for meaning in one’s life).

Examining class year yielded some notable findings. Specifically, class year had a positive effect on the N2 score in blocks 1 and 2; however, when students’ personal perspectives about diversity and life goals were considered in blocks 3 and 4, the class year effect became nonsignificant. This result suggests that perspectives about diversity and attitudes about social behaviors contributed more of an influence on explaining students’ moral judgment score, as opposed to their demographic characteristics such as gender, race, ability, and class year in college. In other words, how a person thinks about moral issues overshadowed characteristics that reflect the personal characteristics of race and class year.

#### *Moral Dilemmas Mediated by Meaning Making Orientation*

The qualitative data provided strong evidence to suggest that the degree to which students are self-authored affected how they made meaning when confronted with moral dilemmas. Many of the quotations indicated that students lacked the moral reasoning capacities to deal with the challenges they face, particularly because of how they made sense of their experiences (i.e., their meaning making orientation). In the paragraphs below, these meaning making themes are presented in conjunction with illustrative examples.

We have organized our analysis of how students' meaning making orientations influenced their moral reasoning around the content themes that we observed in the 45 information rich cases. Students' discussion of moral dilemmas centered on three main areas: alcohol and drugs ( $n=25$ ), challenges in relationships ( $n=10$ ), and academic honesty ( $n=6$ ). Four of the information rich quotations did not fit in any of these thematic categories. Several sub-themes emerged within each of these content areas, and these themes differed according to students' meaning making orientations. Whereas the majority of students from the information-rich cases demonstrated an external level of meaning making, approximately a third used a mixture of external and internal meaning making approaches, and only a few demonstrated meaning making that was primarily internal (i.e., self-authored).

*Drinking and Drugs.* When students were asked in the interviews whether they ever had to make a difficult decision in doing in the right thing, they often shared experiences with drinking and drugs. In dealing with these challenges, students with an *external level of meaning making* tended to respond by avoiding social pressure and maintaining the morals from their upbringing, avoiding drinking in order not to "screw up," making their drinking decisions based on what others would think, applying their morals selectively to meet their own needs, or becoming more open to drinking and allowing others to drink. For each of these responses, students with an external framework for meaning making tended to focus on the importance of others' views in making their decisions about drugs and drinking. A good example of relying on parents' morals was given by Kyung-hu (all names are pseudonyms), a first-year international student. When asked whether there had been times when she had a hard time deciding what was the right thing to do, she responded:

Um, no exactly because a lot of moral issues, I actually trust what my parents taught me, and no matter what how controversial it may be, I just have faith in what my parents say because... I don't know, my parents, also they lead me in Christianity and they teach me a lot of stuff. I believe in what they say, so I really don't have like difficulty in my faith around moral issues.

This student grounded her reasoning in what her parents taught her, which may affect her ability to discern the controversy underlying such issues.

As with Kkyung-hu, faith was also salient for Steve, a first-year student who was more aware of the moral dilemmas inherent in drinking and drugs. He wanted to provide a good example as a Christian, and stated:

Um, I try to live a good life, I guess, I guess you could call it, I don't know. Um, I mean I try not to do anything that would make other people view Christianity, or view me as a hypocrite. Um, I know there's a lot of people who claim to be Christians, but then they'll go out and get drunk, and smoke weed, and all this other stuff, and like, that's just lame. Um, you're giving Christianity a bad name, you know, um, so I try to live accordingly to that. I mean there's nothing wrong with a few drinks, of course not, um, I don't like, I view getting drunk as not, I don't know, that's just not what you're supposed to do, I don't think, but I mean, there's nothing wrong with a couple drinks here and there. I don't care. I do it. Um, but, I just try to live a good life, an upright life, you know. I don't cheat people, things like that.

This quotation captures the fact that Steve was trying to organize his moral thinking in a way that made sense to him, and he seemed unaware of the inconsistencies in his reasoning across

contexts. Whereas he avoids drugs, excessive drinking, and cheating people, he does not acknowledge the legal or moral dilemma of underage drinking.

The sub-themes for students who demonstrated a *mixture of external and internal meaning making* included avoiding pressure by maintaining morals from their upbringing, limiting drinking in order to stay in control, and acting on their own belief system in making decisions about drinking. Many of these students experienced internal conflict as they tried to decide whether to follow others' wishes and viewpoints or to make their own decisions in difficult social situations. Thus, it can be seen that some overlap existed between the themes of students who used a mixture of external and internal approaches and those who relied upon external authorities. Consider the reasoning of Juan, a first-year, male student. He also explained that his moral decisions were based on his upbringing, but for him, the morals that came from parents were starting to become his own:

I don't want to disappoint [my parents]. But it's not only just for them, it's also for myself. It's not that I believe what I believe because they told me what to believe. They taught it to me, and I agreed with them, and so I hold them as my own values because of that. Not only if I gave in to something that conflicted with my values, not only would I disappoint them, it would disappoint me. It's kind of intertwined itself.

Another student displaying both external and internal meaning making struggled with dilemmas that she faced as a resident assistant. This senior was responsible for writing up students who violated the alcohol policy, and had to decide what course of action to take. She stated that "there's been times when... I felt really torn because I want to do the right thing by doing my job and you know that's part of the job. But I want—I also want to do the right thing by umm looking out for their best interests." She felt somewhat trapped by this dilemma, and

would even encourage her residents to stay at friends' houses if they were going to drink so she wouldn't catch them. It was impossible for her to firmly ground her position in what she thought was the right thing to do since she couldn't reconcile her enforcement role with the consequences to them of the resulting penalty.

Two students displayed an *internal orientation to meaning making* in reference to drinking issues that reflects reasoning consistent with early levels of self-authorship. One student based the decision to drink on whether it would hurt anyone, and another student meticulously considered the pros and cons, as well as her own personal goals, in deciding whether to drink. This second person, an international student named Carla, said she was different than most people because she was goal oriented. She explained:

I like to control situations, or I like to know what I'm getting myself into, and like weighing pros and cons of deciding whether or not to drink, when to stop, when to go, who to go with—it has to be something—there has to be aspects within all those situations that I'm able to control. If I feel that I don't have a grasp of what's going on, chances are I'll not get involved in those situations.

In comparison to those who rely on others (e.g., parents, peers) in making decisions about drinking, it's obvious that Carla assumes responsibility for determining what she will do in these situations. This proactive approach allows her to maintain more control in social situations that may become challenging.

*Relationships.* As noted earlier, the second theme among the information rich cases involved relationships; here, students discussed challenges in such contexts as dating, work, and judicial boards. Students with an *external framework* responded to these challenges by maintaining the training from their childhood, treating others the same way that they had been



treated, and struggling between doing what they wanted to do and what they felt was right. For each of these sub-themes, the approval of others weighed heavily in their moral decision-making. The latter sub-theme of an internal struggle is illustrated by an example of a male senior named Greg who served on an institutional judicial board. A controversial case involving hazing came before the committee, and the student felt immobilized in choosing between his principles and his relationships. When the ruling was announced at a press conference, the student reported his reaction:

I stood in this press conference and I kept my head down... I stood there with my hands folded and just... did not want to be there. I did not want to be there. And [the chairman] called me later on and said you know, you know. I was like well I'm not sure, I don't know if I want to pick sides. He's [the chairman] like... "your chairman is asking you to pick sides, to pick this—you know as in you need to be on this side." And it was like, I hope and I pray that it does not go any further because I know that in my heart I cannot—if I disagree, I'm not just going to go along. But at the same time, I cannot, you know, ruin everything for personal reasons. I can't ruin everything I've done for the position—I can't ruin the respect level.

In other words, the student felt a nerve-racking tension that he felt powerless to confront. This quotation provides a powerful illustration of the challenges of having an external framework in a complex world. The quotation also demonstrates that students with an external framework often recognize internal feelings, even though their meaning making is still primarily external. Thus, this example also illustrates the range of development within the general category of using an external meaning making framework.

Students who used a mixed approach also struggled in deciding between their principles and their relationships. However, in contrast to students who relied upon others in making their decisions, these students were able to articulate their own moral principles, but had difficulty using these to act on their own belief system when this challenged their friendships. Such was the case for Benjamin, a senior who served in student government, where it was his responsibility to make financial appropriations. When Benjamin was asked whether he ever had ethical dilemmas, he responded:

Um, sometimes. When I approve stuff like budget modifications, if I know the people a little bit, I'm like..., because I can approve anything below \$250 just by myself, they don't have to come in front of the committee or anything like that. So I'm like, should I really be doing this? 'Cuz I know them or you know, even when I'm leading the meeting, it's like I know the people presenting and they're my friends. So like, if I've always in the back of my mind, am I giving them any special treatment? And then I end up probably being a little harder on them than I am most people because I don't want to appear unethical.

The interviewer followed up on this response by asking how he tries to do what is right ethically. Benjamin explained:

I just, um, I just go by what I feel is right and try make the right decision and when I don't make the right decision, I just, you know, take the consequences. If it's something that becomes a big deal, then I'll deal with it. If not, I'll just know I'll have that guilt and I won't do it again... I just go by what I feel is right and do it.

However, when the interviewer asked Benjamin to describe how he knows if something is right, he had a very hard time providing a basis for his judgment, deferring to what he feels is right.

His awareness of the discomfort associated with trying to be fair even when he was in a position to give special treatment to his friends suggests an awareness of the role conflict; his inability to articulate the elements informing a moral decision suggests he has not yet developed the capacity to speak to his own moral voice based on principles he can explain to others.

*Academic honesty.* Among the moral dilemmas that involved academic honesty, five of the six quotations illustrated an *external framework* for meaning making. Students explained that they wouldn't cheat because they wanted to maintain their parents' morals, that they actually did cheat because it was fun or easy to do, or that they wouldn't allow others to cheat in order to preserve their own self-interests. Clarissa, a first-year female student, provided a striking example of this last sub-theme. Clarissa was very focused on prestige and success, and talked about the need for "playing the game" in college. She described the following situation when she observed two classmates cheating on a test:

And so everybody sitting there is like "Oh my gosh, this test is so hard." And there's two girls behind me and I know them, they live in my dorm. They're whispering "What's the answer to that?" "d" "Okay." So this is like the hardest test we've taken so far and they're cheating. And I'm like, okay, if everybody is going to do bad, I don't want you to do well so that she'll throw out a whole lot of questions and we can do good. Instead of you doing really well and then them [instructors] thinking, 'Why didn't everybody else do as well as they did?' ...I don't want to turn them in but I have to, I really felt bad about it because there's no way. So I told [the instructor]...

Thus, Clarissa decided to inform the instructor of others' cheating not because of adherence to her own internal belief system, but because the cheating would negatively affect her own grade. Another student at the same research university was also very concerned about her academic

standing, which motivated her to cheat in certain contexts. This first-year student differentiated the importance of morals in various domains of her life and demonstrated both external and internal influences in her meaning making. When asked whether she had ever been in a situation where she struggled to do the right thing, Diane remarked:

I think academically with some pressures you are tempted to get help that is not appropriate per se. I've guess I've never been that inclined to it, but I think things like papers—the right thing to do is perhaps not up there with the real moral right or wrongs I guess in a lot of people's minds. So I feel like that's a lot looser but still in the same category of right and wrong. So, I think that I've personally gotten help off of internet sources, but I've felt inclined to word for word take those things, which is still plagiarism, but I think there's a sort of give and take. Like on tests, I really wouldn't consider peeking over someone's shoulder. I think that's just- I guess we sort of determine our own limits and stuff like that but...

Later in the interview, the interviewer noticed that Diane was applying her morals selectively, and asked her how she made sense of this. Diane concluded:

Yeah, I think I'm personally all over the map. I feel like everyone's (pause) got a lot of hypocrisy in their own beliefs, but just seems like the things that are more passionate are more defined. So for me politically, socially, there are certain things that I am more passionate about. So I draw my line very clearly. It's very defined where I stand on certain issues, but I feel like academic right and wrong is important, but I guess it's not something that I'm passionate about. Not something you know I lie awake at night thinking about (laughs).

From these quotations, it is apparent that Diane is beginning to develop her own point of view. However, she has no moral compass that cuts across the contexts she notes, and she does not perceive the consequences of her actions. She is passionate about political or social issues, and sees these as more defined, in contrast to academic honesty areas about which she is less passionate, and therefore less defined in her moral view. This example also illustrates the differences between moral reasoning and other domains of moral character. Although this student (and others like her) is able to reason about moral issues, she shows a low level of moral discernment and has difficulty distinguishing between moral and non-moral issues in determining a course of action.

In summary, many of these quotes suggest that students felt pressure to succeed socially and academically, which challenged their moral character. Students responded by avoiding pressure by maintaining morals from upbringing, applying morals selectively or choosing morals to meet their own needs, struggling between doing what they want and what is right, and acting on their own belief system or not judging others for different belief systems. Although students demonstrating mixed meaning making or early self-authorship sometimes behaved similarly to others with lower levels of meaning making (e.g., deciding not to drink or cheat), the reasons or rationales for their behavior were much more internally driven. This approach will allow them to respond with greater conviction and purpose to the dilemmas they will continue to face in college and throughout their lives.

### *Discussion*

Much can be gleaned from this study's findings on moral reasoning and self-authorship. To begin, the quantitative findings on moral reasoning showed that females and students with higher pre-college academic ability had higher moral reasoning scores, as did students who

highly valued enjoying courses with different perspectives and the importance of developing a meaningful philosophy of life. In contrast, those who valued the importance of helping others in difficulty and the importance of success in one's own business had lower moral reasoning scores. Thus, the regression results suggest that both students' background characteristics and students' espoused values have a significant relationship with moral reasoning. The mixed results in students' values are especially intriguing, given that the altruistic value statement did not predict high moral reasoning. This illustrates that students can value the importance of altruistic behavior without basing their rationale on moral principles.

We observed dramatic differences in moral reasoning (see Table 1) scores by meaning making orientation, in that students' N2 scores differed by approximately 10 points across developmental levels. These differences are comparable to educational level differences in average N2 scores reported in the *Guide for the DIT-2* (Bebeau & Thoma, 2003). That is, the mean N2 scores for juniors in college, MA degree holders, and Ph. D. recipients are 32.65, 41.05, and 51.30, respectively. These are comparable to the mean N2 scores in this sample for those who used either an external, mixed, or internal orientation, which were 32.61, 41.04, and 51.30, respectively. This pattern also reflects the common phenomenon of scoring higher on recognition tasks than on production tasks, as these undergraduate students scored higher on the DIT-2 (comparable to graduate students) than would have been predicted solely on the basis on their educational level or on their observed level of meaning making. These leaps in N2 scores suggest that educators may be able to promote improvement in moral reasoning by concentrating on the fundamental meaning making orientation of students and utilizing a range of contexts and experiences rather than assuming that means of promoting moral development are limited to context specific interventions.

A number of regression findings showing non-significance were noteworthy. First of all, race was not statistically related to moral reasoning, confirming what King and Mayhew (2004) concluded from their literature review. In terms of educational level differences, the quantitative findings indicated that juniors and seniors had higher moral reasoning scores than first-year and sophomore students, although the item measuring class year was not significant in the final regression. These findings may be due to the restricted number of the upper class students.

The qualitative findings showed that students' discussion of morality focused on three areas: drinking/drugs, relationships, and academic honesty. The majority of cases demonstrated that students approached morally challenging situations with an external framework for their meaning making, which often led to frustrating or compromising results. Navigating such situations was less problematic for students with an internal framework because they were not deferring to others' authority or pressure. Other students who were affected by external influences and their own internal framework often recognized the complexities of a moral dilemma, but felt paralyzed by indecision.

In comparing the quantitative and qualitative results, it is informative to consider the differences between tasks that request simple opinions versus those that request an explanation about a decision. For example, some survey items, such as the importance of helping others in difficulty, could be attractive for a variety of reasons, and the students completing this survey would not have to explain why they value this behavior. That is, one could endorse this goal for externally defined reasons (e.g., "it would make me look good," or "it's expected of me") as well as internally defined reasons (e.g., "it's the kind of person I aspire to be"). Another salient example of external reasoning for a moral decision was reported in the quotations from the students who would not cheat. Avoiding cheating is a desirable behavior from a moral

perspective, but when students were asked why they didn't cheat, their responses in the interviews often revealed self-serving attitudes and very simplistic analysis of the situations.

Such examples complicate comparisons between the DIT2 and survey questions, and suggest that caution should be used in making inferences about an internal belief structure or a belief in moral principles based on agreeing with such statements. In other words, the assessment format used can affect what interpretations are made by the students. On this note, King (1990) states that "students often can recognize which of several given options is better on a multiple choice test, but have difficulty constructing such a response on an essay test" (p. 94). Similarly, it is perhaps easier for students to recognize the principled answers to a moral dilemma on the DIT-2 than it is to produce the thinking behind it in the self-authorship interviews.

We also acknowledge that although the focus of this paper is on students' moral reasoning, this is only one dimension of students' moral functioning. The other dimensions of morality are no less important, and they potentially could have meaningful relationships with students' meaning making orientations and provide additional ways of understanding their behavior around moral issues. For example, it would be helpful to collect data on students' behavior in morally challenging situations (e.g., providing alcohol to minors), in order to understand the connection between moral reasoning and moral character.

Due to the findings and limitations of this study that have been addressed, we believe that the conceptual similarities and differences between self-authorship and moral character merit further research based on the strong association documented here. Future studies that employ larger samples sizes, accompanied by further refinements of the assessment of meaning making orientations (e.g., by self-authorship dimension as well as an overall score) could improve our understanding of self-authorship as an interpretive lens for understanding moral development,



and of the nature of the relationship between moral reasoning and self-authorship more generally. Longitudinal studies could trace how this shape changes over time. A larger sample size is being used in the longitudinal phase of WNSLAE, which will help clarify how these constructs evolve for the same students during their college years. As a result, development can be measured over time, instead of inferring development based on educational level differences.

The analyses used in this study convey the complexity of moral development among college student populations. By using a mixed method approach, we were able to gain a fuller understanding of factors affecting students' moral reasoning, including how they are interpreting the morally challenging situations they face in college. In these ways, the use of mixed methods provided a more holistic depiction of the process of moral development.

### *Conclusion*

Promoting students' development in moral reasoning and self-authorship are significant objectives in higher education. Our analysis has attempted to expand on the existing body of scholarly literature by examining the intersection of self-authorship and moral character in college students. Although the DIT2 doesn't measure the same construct as self-authorship, the findings of this paper suggest an important relationship exists between these two ideas, and that our understanding in one domain may be enhanced by our understanding of the other.

As noted at the beginning of this paper, college educators have much to do in addressing the moral development of the students they serve and teach. By understanding the predictors of higher moral reasoning, as well as how students make meaning of the moral dilemmas they face in college, educators can better prepare students to respond to such challenges using an internal framework. Although progress in such development may be incremental from year to year, the

payoffs down the road that will come both individually and collectively will likely be well worth the effort.

*References*

- Association of American Colleges and Universities. (2002). *Greater expectations: A new vision of learning as a nation goes to college*. Washington DC.
- Barber, B. (1998). *A passion for democracy: American essays*. Princeton, NJ: Princeton University Press.
- Baxter Magolda, M. B. (2004). Self-authorship as the common goal of 21st century education. In M. B. Baxter Magolda & P. M. King (Eds.), *Learning partnerships: Theory and models of practice to educate for self-authorship* (pp. 1-35). Sterling, VA: Stylus.
- Baxter Magolda, M. B. and King, P. M. (2006). *Constructing Conversations to Assess Meaning-Making: Self-Authorship Interviews*. Manuscript submitted for publication.
- Baxter Magolda, M. B., King, P. M., Stephenson, E., Kendall Brown, M., Lindsay, N. K., Barber, J. P., & Barnhardt, C. (2007). Paper presented at the American Educational Research Association National meeting, Chicago, IL, April 13, 2007.
- Bebeau, M., Rest, J. R., & Narvaez, D. (1999). Beyond the promise: A perspective on research and moral education. *Educational Researcher*, 28(4), 18-26.
- Bebeau, M., & Thoma, S.J. (2003). Guide for the DIT2. University of Minnesota: Center for the Study of Ethical Development.
- Brabeck, M. (1983). Moral judgment.: Theory and research on differences between males and females. *Developmental Review*, 3, 274-291.
- Cacioppo, J. T. & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology*, 42, 116-131.
- Cannon, K. G. (1988). *Black womanist ethics*. Atlanta, GA: Scholars Press.
- Colby, A. and Ehrlich, T. with Beaumont, E., Rosner, J. & Stephens, J. (2000). Higher education and the development of civic responsibility. In T. Ehrlich (Ed.), *Civic responsibility and higher education*. Westport, CT: American Council on Education.
- Colby, A. & Kohlberg, L. (1987). *The measurement of moral judgment, Vol. 1. Theoretical foundations and research validation*. New York: Cambridge University Press.
- Collins (1990). *Black feminist thought. Knowledge, consciousness, and the politics of empowerment*. Boston: Unwin Hyman.
- Creamer, E. G. and Laughlin, A. (2005). Self-authorship and women's career decision making. *Journal of College Student Development*, 46 (1), 13-27.

- Derryberry, W.P., & Thoma, S.J. (2000). The friendship effect: Its role in the development of moral thinking in students. *About Campus*, 5 (2), 13-18.
- Derryberry, W.P., & Thoma, S.J. (2005a). Moral judgment, self-understanding, and moral actions: The role of multiple constructs. *Merrill-Palmer Quarterly*, 51(1), 67-92.
- Derryberry, W.P., & Thoma, S.J. (2005b). Functional differences: comparing moral judgment developmental phases of consolidation and transition. *Journal of Moral Education*, 34(1), 89-106.
- Endicott, L., Bock, T., & Narvaez, D. (2003). Moral reasoning, intercultural development, and multicultural experiences: relations and cognitive underpinnings. *International Journal of Intercultural Relations*, 27, 403-419.
- Ehlich, T. (2000). (Ed.), *Civic responsibility and higher education*. Westport, CT: American Council on Education.
- Gielen, U. (1991). Research on moral reasoning. In Kuhmerker, L. (Ed.), *The Kohlberg legacy for the helping professions* (pp.33-60). Birmingham, AL: R.E.P Books.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Hammer, M. R., & Bennett, M. J. (2005). *The Intercultural Development Inventory (IDI) Manual*. Portland, OR: The Intercultural Communication Institute.
- Higgins-D'Alessandro, A. (2006). Moral functioning , moral identity, and moral self-concepts. Paper presented at the *Notre Dame Symposium on Personality and Moral Character*. Center for Ethical Education.
- Higher Education Act. (1998). *1998 Amendments to the Higher Education Act of 1965: Section 86: Sense of Congress Regarding Good Character*. Retrieved January 14, 2003, from <http://www.ed.gov/legislation/HEA/sec863.html>
- hooks, b. (1984). *Feminist theory: From margin to center*. Boston: South End Press.
- Hres, D., Vujaklija, A., Ivanisevic, R., Knezevic, J., Marusic, M., & Marusic, A. (2006). Students moral reasoning, Machiavellianism and socially desirable responding: implications for teaching ethics and research integrity. *Medical Education*, 40: 269-277.
- Kegan, R. (1994). *In Over Our Heads: The Mental Demands of Modern Life*. Cambridge, MA: Harvard University Press.
- King, P. M. (2007). Inviting College Students to Reflect on their Collegiate Experiences. Proceedings, Conversation on the Liberal Arts, Westmont College, February 2007.

- King, P. M. (1990). Assessing development from a cognitive developmental perspective. In D. Creamer and Associates, *College student development: Theory and practice for the 1990s* (pp. 81-98). Alexandria, VA: ACPA Media.
- King, P. M. & Baxter Magolda (2005). A developmental model of intercultural maturity. *Journal of College Student Development*, 46 (6), 571-592.
- King, P. M. Kendall Brown, M., Lindsay, N. K. and VanHecke, J. R. (in press-2007) Liberal arts student learning outcomes: An integrated perspective. *About Campus*.
- King, P. M. & Mayhew, M. J. (2004). Theory and research on the development of moral reasoning among college students. In J. C. Smart (Ed.) *Higher education: Handbook of theory and research*, Vol. 19, 375-440.
- King, P. M., Mayhew, M. J. (2002). Moral judgment development in higher education: Insights from the Defining Issues Test. *Journal of Moral Education*, 31(3), 247-270.
- Kohlberg, L. (1969). The cognitive developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory*. Chicago: Rand McNally.
- Kohlberg, L. (1975). The cognitive-developmental approach to moral education. *Phi Delta Kappan*, 56, 110-125.
- Kohlberg, L. (1981). *Essays on Moral Development: The Philosophy of Moral Development: Moral Stages and the Idea of Justice* (vol.1). San Francisco: Harper & Row.
- Kohlberg, L. (1984). Moral stages and moralization: The cognitive-developmental approach. *The psychology of moral development: The nature and validity of moral stages*, 170-205. San Francisco: Harper & Row Publishers.
- Livingstone, G., Derryberry, W.P., King, A., & Vendetti, M. (2006). Moral development consistency? Investigating differences and relationships among academic majors. *Ethics & Behavior*, 16(3), 265-287.
- Morton, K.R., Worthley, J.S., Testerman, J.K., & Mahoney, M.L. (2006). Defining features of moral sensitivity and moral motivation: Pathways to moral reasoning in medical students. *Journal of Moral Education*, 35(3), 387-406.
- National Association of State Universities and Land-Grant Colleges (1997). *Returning to Our Roots: The Student Experience*
- National Study of Liberal Arts Outcomes (2003). *Liberal arts outcomes*. University of Michigan Liberal Arts Study Team, October 22, 2003. Unpublished paper, University of Michigan.

- Noddings, N. (1984). *Caring: A feminine approach to ethics and moral education*. Berkley, CA: University of California Press.
- Noddings, N. (1988). An ethic of caring and its implications for instructional arrangements. *American Journal of Education*, 96, 215.
- Noddings, N. (1989). *Women and evil*. Berkeley: CA: University of California Press.
- Noddings, N. (1992). *The challenge to care in schools: An alternative approach to education*. New York: Teachers College Press.
- Noddings, N. (1995). Care and moral education. In W. Kohli (Ed.), *Critical conversations in philosophy of education*, 137 – 148. New York: Rutledge.
- Noddings, N. (1999). Care, justice and equity. In M. Katz, N. Noddings & K. & Strike (Eds.), *Justice and caring: The search for common ground in education*. (pp. 7). New York: Teachers College Press
- Palmer, P. (2002). Foreward. In W. M. McDonald (Ed.), *Creating campus community: In search of Ernest Boyer's legacy*. San Francisco: Jossey-Bass.
- Pascarella, E. T. & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.
- Raaijmakers, Q.A.W., Engels, R.C.M.E., & Van Hoof, A. (2005). Delinquency and moral reasoning in adolescence and young adulthood. *International Journal of Behavioral Development*, 29(3), 247-258.
- Reed III, A., Aquino, K., & Levy, E. (2007). Moral identity and judgments of charitable behaviors. *Journal of Marketing*, 71, 178-193.
- Rest, J. R. (1979). *Development in judging moral issues*. Minneapolis, MN: University of Minnesota.
- Rest, J.R. (1984). The major components of morality. In W. Kurtines, and J. Gerwitz (Eds.), *Morality, Moral Development, and Moral Behavior* (pp.24-38). NY: Praeger Press.
- Rest, J. R., Thoma, S. J. & Edwards, L. (1997). Designing and validating a measure of moral judgment. Stage preference and stage consistency approaches. *Journal of Educational Psychology* 89(1), 5-28.
- Rest, J. R., Narvaez, D., Bebeau, M., & Thoma, S. J. (1999). *Postconventional moral thinking: A neo-Kohlbergian approach*. Mahwah, NJ: Lawrence Erlbaum Associates.

- Reuben, J. A. (1996). *The making of the modern university: Intellectual transformation and the marginalization of morality*. University of Chicago Press, Chicago, IL.
- Rich, J. M. & DeVitis, J. L. *Theories of moral development* (2nd ed.). Springfield, IL: Charles C. Thomas.
- Siddle Walker, V., & Snarey, J. R. (2004). *Race-ing moral formation: African American perspectives on care and justice*. New York: Teachers College Press.
- Tappan, M.B. (2006). Moral functioning as mediated action. *Journal of Moral Education*, 35(1), 1-18.
- Thomas, N. (2002). In search of wisdom: Liberal education for a changing world. *Liberal Education*, 88(4), 28-33.
- Thompson, A. (1998). Not for the color purple: Black feminist lessons for educational caring [Electronic version]. *Harvard Educational Review*. 68(4), 522-555.
- Tyree, T. (1998). Designing an instrument to measure socially responsible leadership using the social change model of leadership development. *Dissertation Abstracts International*, 59(06), 1945. (UMI No. 9836493)
- Wabash National Study of Liberal Arts Education (2006). Project website. Retrieved on July 15, 2006 from <http://liberalarts.wabash.edu/cila/nationalstudy>
- Walker, L.J. (2006). Moral personality exemplified. Paper presented at the *Notre Dame Symposium on Personality and Moral Character*. Center for Ethical Education.
- West, T., Pickard Ravenscroft, S., & Shrader, C.B. (2004). Cheating and moral judgment in the college classroom: A natural experiment. *Journal of Business Ethics*, 54, 173-183.

Table 1

*Means & Standard Deviations of Variables Used in Moral Development & Self-Authorship Analysis*

Independent Variable	DIT2 Only N=211	SD	Interview Group N=96	SD	Over
N2Score	34.77	14.66	35.97	14.30	
Gender (Female) <sup>a</sup>	65%		62%		
Race (Minority) <sup>a</sup>	19%		21%		
Pre-college Academic Ability <sup>b</sup>	0.01	0.89	-0.03	1.20	
Class Year	0.05	0.87	0.07	1.32	
Values different perspectives <sup>c</sup>	3.68	0.93	3.57	0.94	
Enjoys courses with different perspectives <sup>c</sup>	3.91	0.85	3.73	1.04	
Values contact with diverse people <sup>c</sup>	3.77	0.95	3.70	1.00	
Importance of helping others in difficulty <sup>d</sup>	3.16	0.76	3.01	0.88	
Importance of developing meaningful philosophy of life <sup>d</sup>	2.75	0.94	2.88	0.91	
Importance of success in one's own business <sup>d</sup>	2.35	1.08	2.32	1.03	
Importance of making a lot of money <sup>d</sup>	2.54	0.93	2.43	0.94	

*a* dummy variable*b* Standardized variable,  $M=0, SD=1$ *c* Measured on a 1 (Strongly Disagree) - 5 (Strongly Agree) Likert type scale*d* Measures on a 1 (Not Important) - 4 (Essential) Likert type scale



Table 2

*Distribution of N2 scores by Student Characteristics*

	Mean	SD
<i>Class Year</i>	35.15	14.53
First-Year (N=101)	32.46 *	14.23
Sophomore (N=93)	34.13 **	13.47
Junior (N=50)	38.02	15.63
Senior (N=63)	38.66	14.87
<i>Gender</i>		
Male	32.39	14.91
Female	36.65 *	14.13
<i>Race</i>		
Minority	32.61	15.79
Majority	35.75	14.18
<i>Meaning Making Orientation</i>		
External Meaning Making (N=58)	32.61 **	14.1
Combined Meaning Making (N=31)	41.04	13.58
Internal Meaning Making (N=3)	51.30 ~	3.52

~ $p < .10$ , \* $p < .05$ ; \*\* $p < .01$ , \*\*\* $p < .001$

Note: The contrast comparisons for the meaning making orientation refers to each group compared to the other two groups together