

ABSTRACT

Title of Dissertation: SCHOOL-RELATED APATHY IN 8th- and 10th-
GRADE STUDENTS: A MIXED-METHOD
EXPLORATION OF DEFINITIONS, CONSTRUCT
INDEPENDENCE, CORRELATES, AND GRADE-
LEVEL DIFFERENCES

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Research-based and folk conceptualizations of school-related apathy were explored in 309 8th- and 10th- grade Catholic school students and their teachers. Definitions, construct independence, and relation to select individual and group differences including grade level were examined. Findings indicated that while some independence exists among the set of five constructs assessed—adolescent apathy, amotivation, apathy syndrome, disengagement, and work avoidance—substantial overlap is present that can inform development of a more parsimonious conceptualization of students' lack of school motivation centered on perceived relevance and a general attitude of interest. Results also demonstrated only moderate levels of agreement between research-based and teacher identification of students low on school-related motivation; however, both approaches indicate that approximately 1 in 4 students manifests markedly low school-related motivation. Relations of several individual and group differences to conceptualizations of school-related apathy were documented in expected directions. Implications of the findings for educational research and practice are discussed.

SCHOOL-RELATED APATHY IN 8th- and 10th- GRADE STUDENTS:
A MIXED-METHOD EXPLORATION OF DEFINITIONS,
CONSTRUCT INDEPENDENCE, CORRELATES, AND
GRADE-LEVEL DIFFERENCES

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DEDICATION

This work is dedicated
to my mother, Sally Haddad Riconscente, Ed.D.,
whose goodness and spirit of determination
are always with me,
and in memory of my grandfather,
Nämeý Abraham Haddad,
whose fascination with every detail of reality
continues to fuel my research.

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CHAPTER 1

INTRODUCTION

In recent decades, parents, researchers, practitioners, and school reformers have expressed repeated concern over an apparent epidemic of apathy and disengagement among students (e.g., Bartlett, 2003; Goslin, 2003; Sadker & Sadker, 2003; Sizer, 2003). Brophy (2004) suggests that students' "apathy, not discouragement, is the ultimate motivational problem facing teachers" (p. 307). A national report identified anonymity and apathy as the two main barriers to high school students' academic development (National Association of Secondary School Principals & The Carnegie Foundation for the Advancement of Teaching, 1996). Echoing these concerns, *Engaging Schools* (National Research Council & The Institute of Medicine, 2004) marshals powerful, and alarming, evidence of a profound lack of student engagement in academics, a trend that seemingly increases with age. Black (2003, p. 58) reports "disconcerting" numbers of indifferent and disengaged students at a high school she toured in upstate New York, while Toch (2003a, 2003b) characterizes students in comprehensive high schools as alienated and apathetic. Friedman (1993) cautions that "apathy in the classroom today may be the forerunner of apathy in the citizenry of tomorrow" (p. 33).

The "apathy" problem is not restricted to a particular age group. Elementary school educators report on interventions designed to counter apathy and absenteeism (Haslinger, Kelly, & O'Hare, 1996). Middle-school students participating in a longitudinal study reported frequent boredom both in and out of school (Larson & Richards, 1991). And addressing the "underlying problems of student anonymity [and] apathy ...at the [high] school" (p. 337) was the aim of the intervention developed and

researched in a year-long case study by McPartland, Balfanz, Jordan, and Legters (1998).

References to apathy appear in multiple disciplines, each with a particular conceptual definition of the term. Definitional emphases extend from absence of observable activity to lack of emotion. In the political arena, voter apathy is an area of concern, as is general political apathy reflected in an absence of activism or engagement in local or federal government (Jacoby, 1999; Kimberlee, 2002). In the discipline of philosophy, theoretical explications of apathy tend to be linked to its etymological roots in the word *pathos*: being moved or affected (Furtak, 2003). In the medical field, apathy frequently has been considered in association with injury or illness, particularly as comorbid with Parkinson's (Marin, 1991; Marin, Biedrzycki, & Firinciogullari, 1991), dementia and Alzheimer's (Cummings, Mega, Gray, Rosenberg-Thompson, Carusi, & Gornbein, 1994; Starkstein, Ingram, Garau, & Mizrahi, 2005), and traumatic brain injury (Gouick & Gentleman, 2004). References to apathy can be found in other fields as well, such as journalism (e.g., with respect to publication readership; Cornog, 2005) or economics (e.g., consumer behavior; Prewitt, 2005).

Statement of the Problem

Frequent use of the term to describe students, coupled with the broad range of meanings ascribed to apathy in varied contexts, underscores the importance of adopting a sharper conception of it for purposes of research in schools. Prior research into the relation between motivation and learning (e.g., Corno, 1993; Harackiewicz, Barron, Carter, Lehto, & Elliot, 1997) suggests that, for purposes of education, the display of apathy poses a challenge to teachers, compromises students' learning and consequently represents an important and relevant target of research. A review of empirical literature

identified several candidates for this specialized construct, which I term “school-related apathy.” It may be that one or more of these existing constructs adequately conceptualizes and operationalizes school-related apathy. Alternatively, a shared conceptualization and valid measures able to detect school-related apathy have not yet been developed.

Further, the bulk of developmental research in motivation toward school and learning has concentrated on the transition from elementary school to middle school, documenting declines in motivation (Eccles, Wigfield, Midgley, Reuman, MacIver, & Feldlaufer, 1993; Isakson & Jarvis, 1999; Murdock, Anderman, & Hodge, 2000). Research suggests that this decline continues through the high-school years (e.g., Barber & Olsen, 2004; Gillock & Reyes, 1996). However systematic examination of student motivation spanning the transition into high school is wanting. Contextual factors that distinguish elementary schools from middle schools have been judged partly responsible for decreases in motivation among middle-school students (Eccles et al., 1993). Since contextual changes—such as heightened achievement expectations and larger school size—also characterize the transition into high school, it is reasonable to suspect that these may also exert influence on student motivation.

Accordingly, there is a need to determine the degree to which existing research-based apathy constructs reflect the meanings of apathy toward school intended by teachers, particularly regarding students on either side of the transition from middle to high school. Moreover, in the interest of greater parsimony, studies are needed to empirically gauge the statistical independence of research-based apathy constructs for middle- and high-school students. In addition to establishing a clear conceptualization

and operationalization of school-related apathy, research is necessary to estimate the proportion of middle- and high-school students in whom it manifests. If the incidence of school-related apathy is deemed substantial in these populations, it consequently will be vital to investigate such issues as contextual factors that may play a role in the ontogeny of school-related apathy, the relation of individual and group differences to school-related apathy, and the extent to which particular educational practices at the middle- and high-school levels might effectively counter school-related apathy in students.

It is worth noting that challenges are inherent in investigating a term that carries strong folk connotations, as evidenced by the troubled history that has plagued the term “alienation” (e.g., Feuer, 1962; Shepard, 1977). Thus, the viability of assigning more specificity to this oft-used term—“apathy”—remains to be ascertained.

Purposes of the Study

The purposes of the present study were threefold. The first purpose was to explore the definitions and prevalence of school-related apathy, comparing research-based conceptualizations and operationalizations to those of middle- and high-school teachers. Second, the study sought to identify what relations may exist between various conceptualizations of apathy and theoretically associated individual characteristics such as curiosity or academic achievement. The third purpose was to examine whether grade-level differences between 8th- and 10th-grade students were present with respect to conceptualizations of school-related apathy and its relation to individual variables.

In order to gather rich data for each of the study’s purposes, a mixed-methods approach was adopted, applying the principle of complementarity in generating and analyzing quantitative and qualitative data streams (Green & McClelland, 1999). More

specifically, following Bryman's (2006) taxonomy, the methodology of the present study was based on a *diversity of views* rationale, appropriate when the goals of research are to "[combine] researchers' and participants' perspectives through quantitative and qualitative research respectively, and to [uncover] relationships between variables through quantitative research while also revealing meanings among research participants through qualitative research" (pp. 106-107).

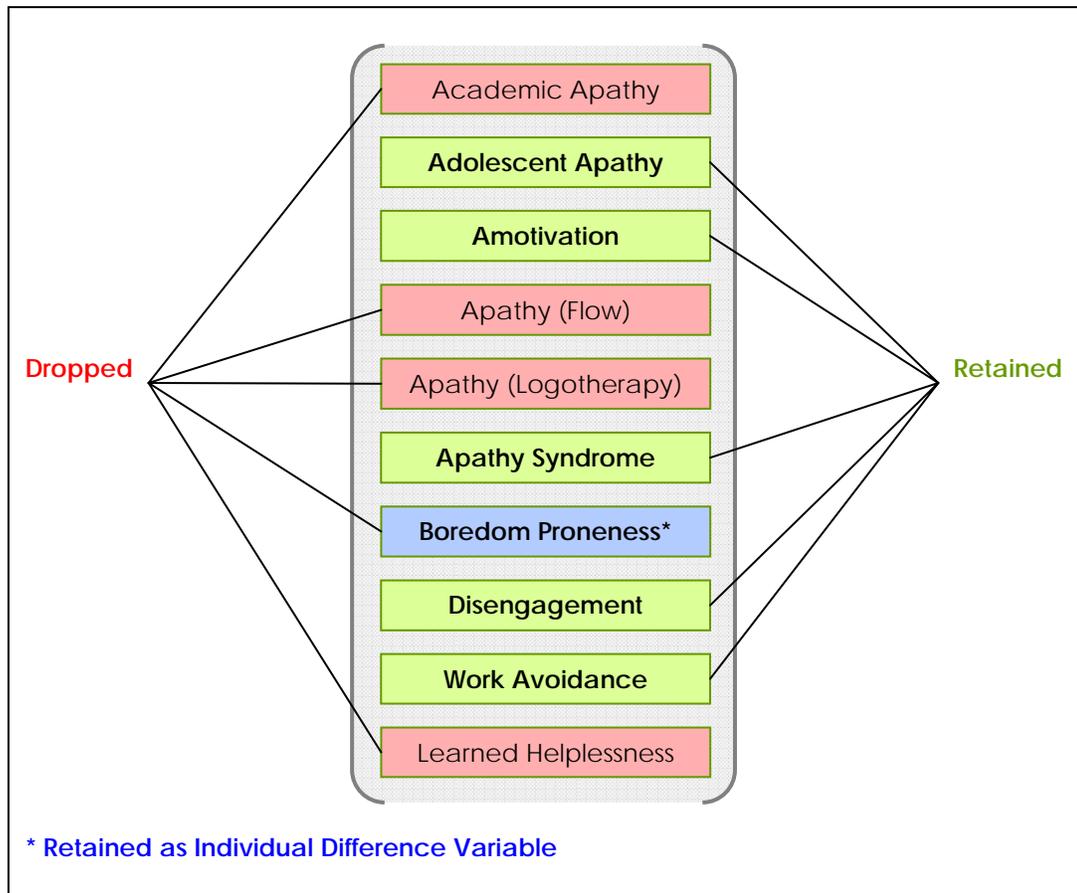
Participants in the study were 8th- and 10th-grade students as well as teachers of these grades in participating students' schools. Students in participating schools attended elementary school from 1st through the 8th grade and entered high school in the 9th grade. Both participating high schools served grades 9 through 12. Consequently, 8th graders in the study participated approximately one year prior to the transition into high school, and 10th graders participated approximately one year after that transition.

Research Questions and Hypotheses

The purposes of the study translated into three overarching research questions (see Figures 1 through 5).

- 1a. To what extent are research-based conceptualizations of apathy toward school statistically independent?
- 1b. How do teachers and students conceptualize school-related apathy, and to what extent are those "folk constructs" consistent with research-based conceptualizations?
- 1c. How prevalent is school-related apathy in students, and how do students' and teachers' beliefs about its prevalence compare?

Figure 1

Apathy Constructs Reviewed

Note. This figure indicates the ten constructs reviewed for inclusion in the present study.

In general, it was expected that research-based conceptualizations of school-related apathy—operationalized as adolescent apathy, amotivation, apathy syndrome, disengagement, and work avoidance—would emerge as distinct yet moderately correlated constructs. Groups of students nominated by teachers as either clearly apathetic, clearly non-apatetic, or middle-of-the-road were expected to differ accordingly and significantly in mean levels of research-based apathy constructs. It was further expected that data culled from student and teacher interviews would only partially reflect the

operationalizations of existing constructs, and that new insights into what school-related apathy is and how it is perceived by students and teachers would be captured. Given the paucity of prior research on the prevalence of student apathy toward school, no specific predictions were made. However, in light of numerous references to this characteristic, it was expected that a substantial portion of 8th- and 10th-graders would report at least mild apathy for school-related activities, and that these reports would be corroborated by teacher-reported data.

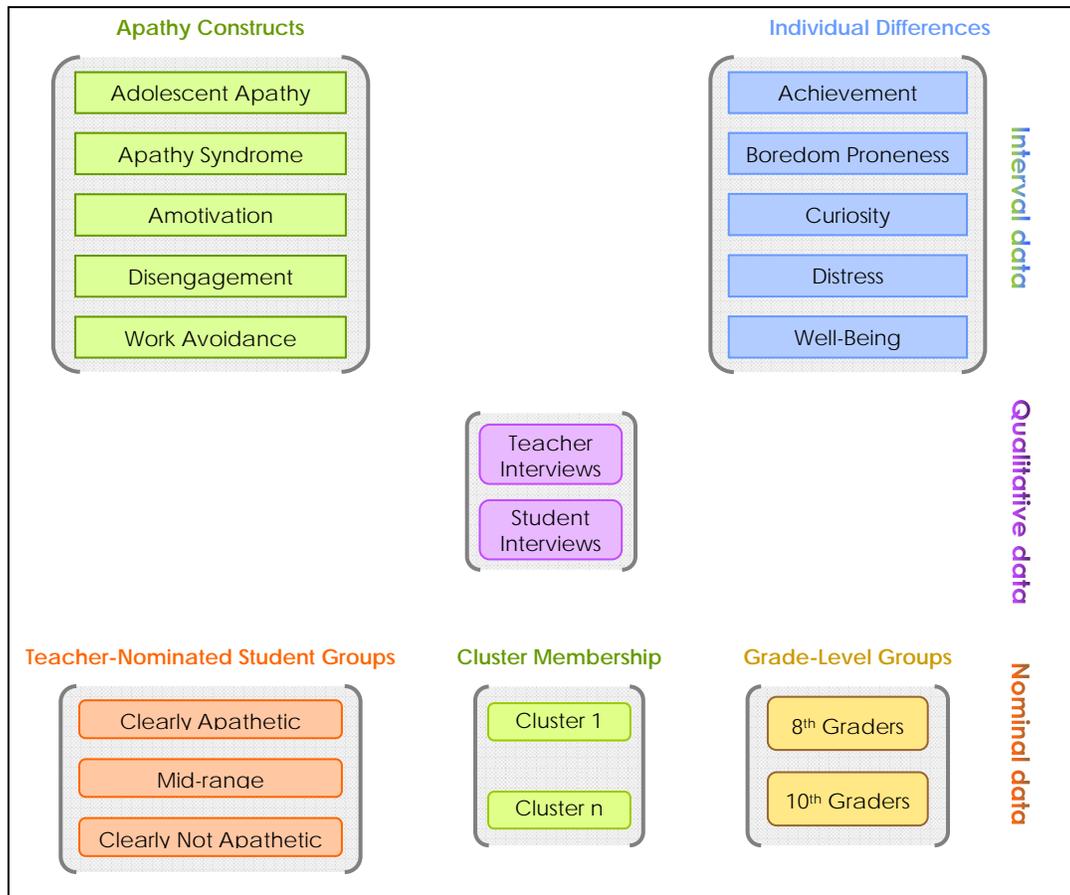
2. How is self-reported school-related apathy related to select individual and group differences variables and what patterns among those variables characterize groups of students?

The second question addressed correlates of the apathy and apathy-related constructs theoretically relevant to school motivation. The constructs were expected to correlate moderately and positively with boredom proneness and distress, and to demonstrate moderate negative relations with curiosity, well-being and academic achievement.

Gender was also analyzed, with girls expected to report overall higher school-related motivation than boys, based on prior research (e.g., Eccles et al., 1993; Meece & Holt, 1993; Meece & Miller, 2001). Since the sample was drawn from students attending Catholic schools, relations between religion and level of religious observance to the apathy constructs were examined for differences that could inform generalizability and future research.

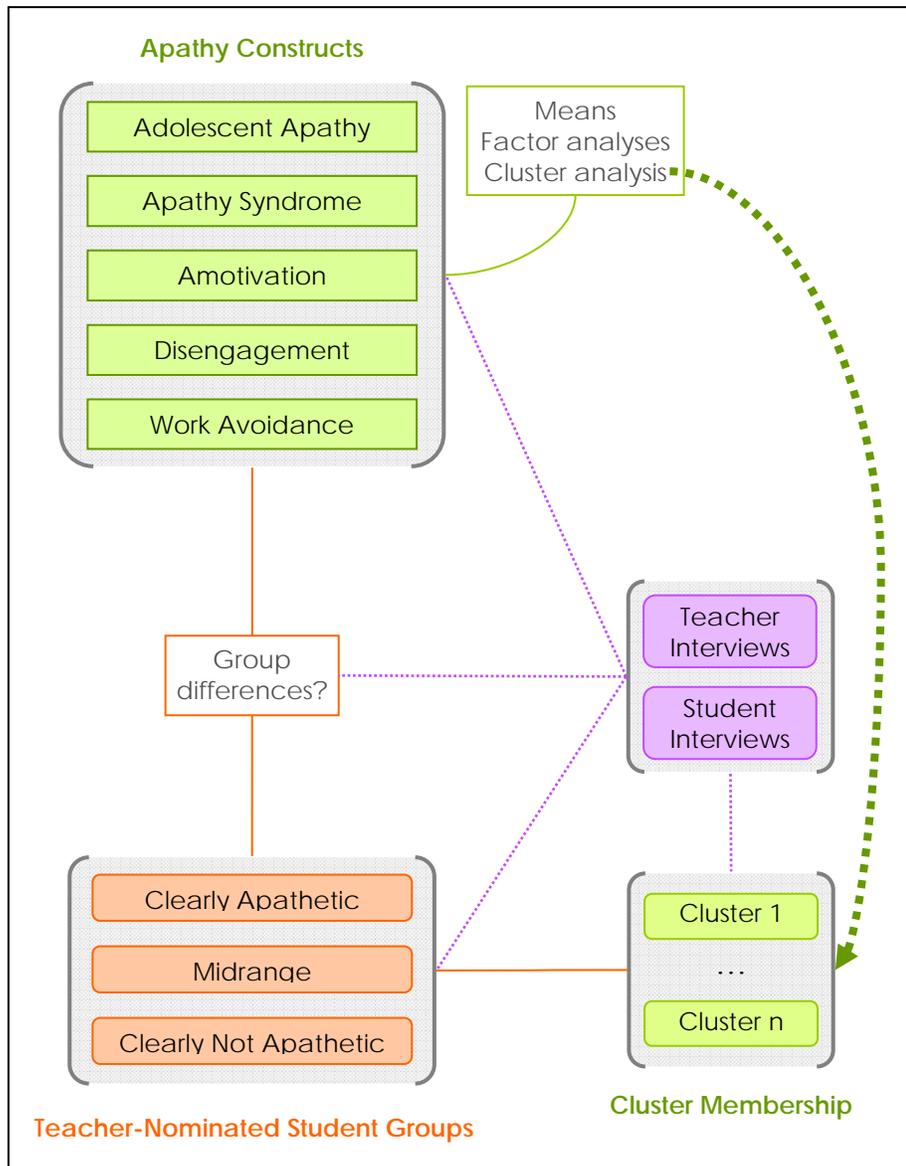
Based on the research-based constructs, two to three clusters were hypothesized to emerge and to vary in mean levels on convergent variables (e.g., boredom proneness or curiosity).

Figure 2

Data Categories

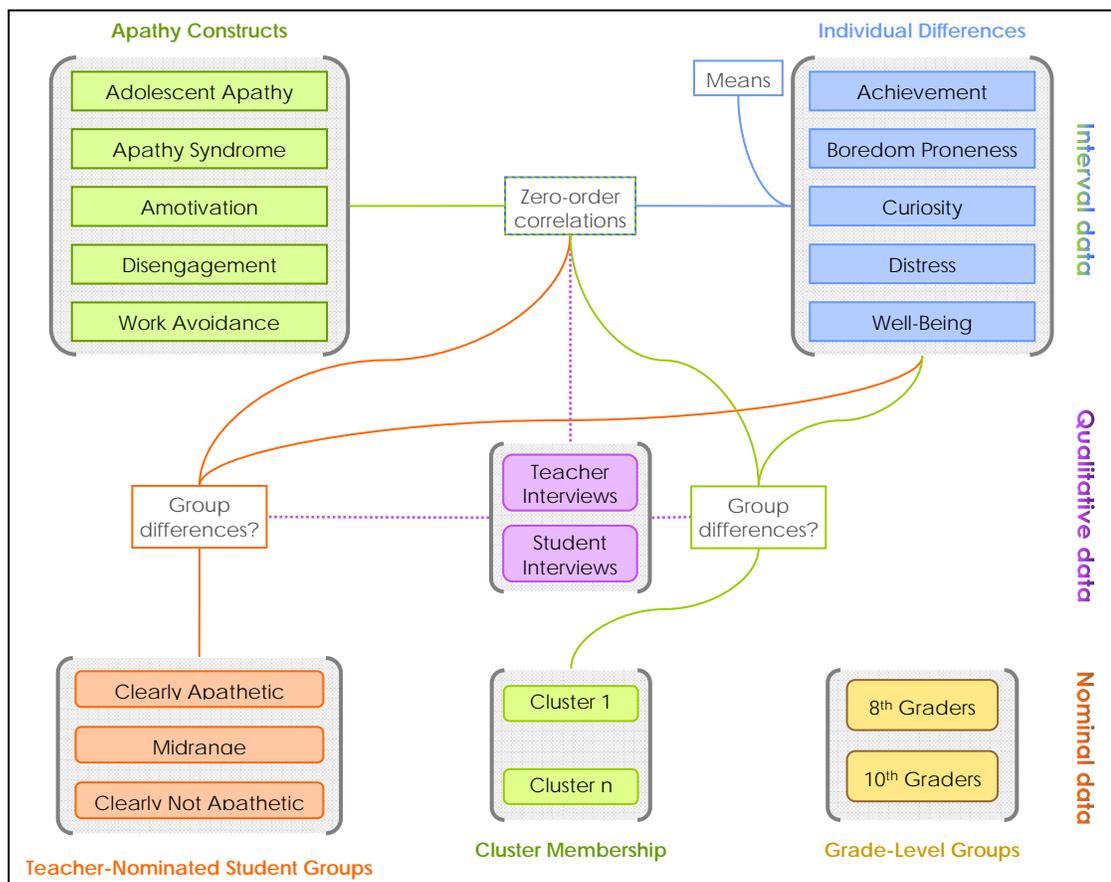
Note. Figure displays data sources used in the present study, organized from top to bottom by measurement scale.

Figure 3

Data Sources and Analyses: Research Question 1

Note. Figure indicates relevant data and analyses conducted to respond to the first research question. Descriptive statistics were obtained for the 5 apathy variables, and both factor analyses and cluster analyses were conducted to identify patterns among variables and participants. Differences between teacher-nominated apathy groups were examined for statistical and practical significance. Clusters were qualitatively compared on interview data results and teacher nomination scores. Interpretation of all results were informed by data from interviews with teachers and students.

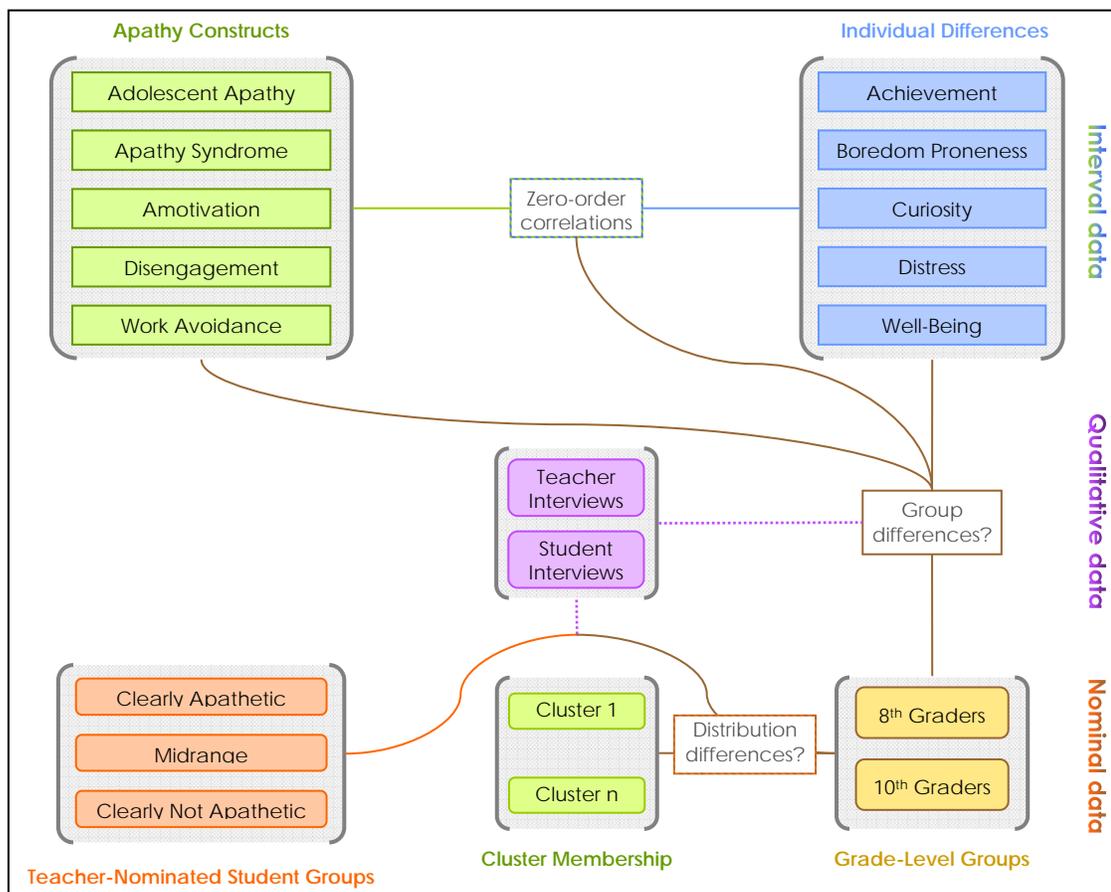
Figure 4

Data Sources and Analyses: Research Question 2

Note. This figure represents the analyses conducted to respond to Research Question 2.

Boxes labeled “Group differences?” indicate ANOVA or qualitative tests, with group membership based on teacher nominations or cluster score. The dotted lines from teacher and student interviews indicate that these data were applied in interpreting quantitative results.

Figure 5

Data Sources and Analyses: Research Question 3

Note. Figure indicates analyses conducted between data groups to respond to the third research question of the present study, which focused on grade-level differences. T-tests were conducted to compare grades on the apathy and individual differences variables. To examine grade-level differences in distributions of nominal scale data, chi-square analyses were performed. The dotted lines from interview data denote the use of these data to interpret of quantitative results.

3. Is there variation between 8th and 10th graders in the conceptualization, prevalence, and associated individual and group differences of self-reported school-related apathy?

Based on the extant literature (e.g., Gottfried, Fleming, & Gottfried, 2001; Harter, 1998; Otis, Grouzet, & Pelletier, 2005), the expectation was that apathy would be more pronounced and reflect increased variance in the later adolescent years, and that older students would reflect higher differentiation (i.e., form more clusters) than would students on the threshold of adolescence.

Definitions of Terms

In order to discuss and answer the aforementioned research questions, the following terms were used:

Students high on *academic apathy* are uninterested in course work and concerned primarily with appearing successful rather than with actually learning (Davidson, Beck, & Silver, 1999).

Adolescent apathy is a multidimensional trait characterized by lack of goal-setting behaviors, energy, and interest, indifference to changes, and difficulty making decisions as assessed by self, teachers, parents, and friends (Handelman, 1999).

Amotivation is defined as the lack of intention to act resulting from lack of valuing or feeling of competence for the activity (Ryan & Deci, 2000b).

Marin and colleagues (1990, 1991, 1997a, 1997b; Marin, Biedrzycki, & Firinciogullari, 1991), working within a psychiatric disorders framework, defined *apathy* as a state of primary motivational impairment that cannot be attributed to diminished level of consciousness, cognitive impairment, or emotional distress.

Boredom proneness is a state of relatively low arousal and dissatisfaction (Mikulas & Vodanovich, 1993). In addition to a state definition that attributes boredom to an inadequately stimulating environment, researchers have also examined boredom proneness as a potential individual trait (Harris, 2000; Vodanovich & Kass, 1990).

Curiosity is defined as a “positive emotional-motivational system associated with the recognition, pursuit, and self-regulation of novelty and challenge” (Kashdan, Rose, & Fincham, 2004, p. 291).

Disengagement is consistently defined in terms of low or decreasing participation in mandatory as well as extracurricular school activities, such that total disengagement coincides with school dropout (Fredricks, Blumenfeld, & Paris, 2004).

Distress is defined as “individuals' tendencies to feel dissatisfied with themselves and their ability to achieve desired outcomes. Proneness to anxiety, depression, low self-esteem, and low well-being are operationally defined as subtypes of distress” (Weinberger & Schwartz, 1990, p. 382).

Learned helplessness refers to the repeated attribution of stable, internal causes for failure, such that individuals perceive a noncontingency between their actions and outcomes (Burhans & Dweck, 1995; Peterson, 1992; Seligman, 1975).

Work avoidance describes students who consistently put forth as little effort as required to get by academically (Meece, Blumenfeld & Hoyle, 1988; Meece & Holt, 1993; Nicholls, Patashnick, & Nolen, 1985).

Potential Significance

This study is expected to contribute to the literature in at least four ways:

1. Establishing a clear conceptual and operational definition of apathy is a key step to identifying the causes of school-related apathy, which future research can address. The present study laid the groundwork for the conceptualization, operationalization, and modeling of school-related apathy and forwarded recommendations for definitions, measures, and models of school-related apathy. In addition, by gathering open-ended accounts of school-related apathy coupled with quantitative responses to survey items, the study contributed to a body of research that can eventually describe pedagogical approaches which successfully decrease student apathy and associated deleterious effects on well-being and achievement.
2. Current research has not systematically determined the prevalence of self-reported apathy in middle- and high-school students. Consequently, it is not yet evident whether a true problem exists that should be addressed with interventions. By estimating the incidence of apathy among 8th- and 10th-grade students, the study served as a needs assessment.
3. Proliferation of constructs presents a recurring challenge to psychological research. By gathering quantitative data on several related constructs from the same sample, the study estimated the degree of construct independence and informed a more parsimonious operationalization of apathy in middle- and high-school students.

4. Much research into motivation is focused on academic achievement. In addition to assessing this important variable for decisions related to instructional practice, the present study addressed the psychological well-being of students.

CHAPTER II

REVIEW OF RELEVANT LITERATURE

The purpose of this review is to construct a foundation for empirically exploring both research-based and folk perspectives on the definition, prevalence, correlates, and grade-level differences of apathy toward school. The following three questions guided the review of literature.

1. How is apathy toward school defined and operationalized in the extant literature and what indications does the literature offer regarding the prevalence of apathy toward school among middle- and high-school students?
2. What evidence does the research literature provide regarding both the relation of apathy toward school to select individual and group differences variables and the patterns among those variables for middle- and high-school students?
3. Does the research literature suggest that levels and correlates of apathy toward school differ between students in middle school and high school?

The overarching selection strategy for the review was to search the peer-reviewed literature for all constructs that may have already defined apathy toward school. Two possibilities were examined: constructs which refer directly to apathy by using that term (e.g., adolescent apathy) and apathy-related constructs that do not use the term apathy but appear to be conceptually close (e.g., amotivation).

The review is arranged in three major sections. In the first two sections, the two categories (i.e., apathy, apathy-related) provide an organizing frame for presenting each construct with its conceptual definition, measures, correlates and key findings. The concluding section lays out directions for further research.

The present study, while seeking to understand apathy that may affect students beyond their school-related experiences, targeted operationalizations, findings, and correlates with direct relevance to formal education. Certainly, apathy in middle- and high-school age individuals may be a general state or trait not directly bound to school settings or, alternatively, exclusively bound to school settings. However, it was theorized that while apathy may only occur in school, it is unlikely that apathy would be observed in all contexts of students' lives *except* school. Thus, even a general apathy state or trait would be expected to present in the school context.

Selection Criteria

The challenge inherent in conducting an exploratory study linked closely to the meaning of a construct is to avoid circular reasoning, wherein an *a priori* definition is selected, and only constructs which match that definition are reviewed, thus compromising both the scope of analysis and the validity of findings. Nevertheless, it was necessary to apply some criteria in selecting constructs and research articles that would form the theoretical foundation for the study.

First, a dictionary definition was combined with a search through the research literature for synonyms and constructs theoretically related to apathy. To ensure that this process exhausted the extant literature, several histories of motivation (Pintrich & Schunk, 1996; Stipek, 2002; Thorkildsen, 2002) were consulted, as were professors of educational psychology, educational policy, and curriculum and instruction. A second strategy was applied based on the etymology of the word itself. The “a-” prefix indicates “absence” or “lack,” in contrast to “negative,” and the root “pathy” suggests “being moved, experiencing.” This consideration resulted in the exclusion of constructs

exclusively focused on competence beliefs or self-beliefs (e.g., self-efficacy). Further, in keeping with the exploratory nature of the study, the review targets what apathy *is* rather than what it is *not*. Consequently, constructs and theories which may represent the opposite of apathy were not included (e.g., individual interest, expectancy-value theory), and specific antecedents and consequences of school-related apathy were not pursued. However, based on findings from the present study, future research may engage comparative analyses to explore alternative conceptualizations as well as developmental trajectories of school-related apathy.

Consistent with the assumptions described herein, an additional criterion for inclusion was that studies be conducted in educational settings. Excluded from consideration were studies targeting substance abuse contexts, students with learning disabilities, or physical education as the primary domain, since this review targets motivation of normally-functioning individuals in mainstream educational settings. Articles reporting apathy as a psychopathological condition were considered for the purpose of informing theoretical and operational definitions of the construct; findings from these studies are presented only as salient to the current review. For each apathy-related construct, pertinent studies were sampled for this review, so as to represent the major findings and trends in terminology, measures, methodology, and correlates.

In addition to selected seminal works and theoretical pieces, the empirical research literature catalogued in PsycInfo and published in English in peer-reviewed journals between 1990 and 2005 was searched for the terms *apathy*, *amotivation*, *boredom*, *disaffection*, *disengagement*, *learned helplessness*, *work avoidance* and *lack of interest*. Table 1 presents the list of constructs addressed in the review.

Table 1

Summary of Apathy and Apathy-Related Constructs

Construct	Theoretical Approach	Dimensions				
		Cog	Beh	Emot	State	Trait
Academic Apathy	Goal Theory	X		X		*
Adolescent Apathy		X	X	X		*
Apathy	Flow	X			*	
Apathy	Logotherapy			X	*	*
Apathy Syndrome		X	X	X		*
Amotivation	Self-Determination Theory	X			*	*
Boredom				X	*	*
Disengagement			X			*
Learned Helplessness	Attribution Theory	X				*
Work Avoidance	Goal Theory	X		X	*	*

Note. Cog: Cognitive; Beh: Behavioral; Emot: Emotional.

Apathy Constructs

In this section, empirical research in the extant literature targeting apathy constructs is synthesized. The aim is to inform the theoretical definition, operationalization, and study of apathy as a psychological construct pertinent to understanding students' motivation to participate in school. Definitions and measures used to tap apathy constructs are described, and an overview of research examining correlates and potential developmental pathways is provided.

In total, a key-word search for peer-reviewed articles in PsycInfo spanning the years 1990 through 2005 yielded nearly 150 studies with “apathy” in their title or abstract. However, among these, relatively few developed or elaborated on apathy as a construct. Only five constructs were identified that explicitly consider apathy in contexts salient to learners (see Table 1). The variability in definitions ascribed to these five constructs is reflected both in diverse research methods and in choices of variables investigated as potential correlates.

It is worth noting that the apathy construct appears as well in the literature on classroom context. Specifically, apathy is one of twelve dimensions tapped by the Learning Environments Inventory, or LEI, developed by Fraser and colleagues (Fraser, 1986; Fraser, Anderson, & Walberg, 1982). The LEI defines apathy as “the extent to which the class feels no affinity with the class activities” (Fraser, 1986, p. 18). However, the study of classroom contexts using the LEI is not represented here as no further conceptual or operational definitions were identified in the literature, and no studies were found that specifically targeted the apathy dimension.

Academic Apathy

One area in which apathy has received explicit mention is the goal orientations literature, which characterizes individuals’ general disposition toward academic tasks according to whether their goal is to learn the material well, or to appear successful. Labels vary across researchers, with the former typically referred to as “mastery” or “learning” orientation, and the latter as “performance” orientation (Pintrich, 2000; Schunk, 2000). Among the conceptualizations of student orientations forwarded in goal orientation studies, the only explicit mention of apathy is found in a study investigating

the measurement properties of the Survey of Academic Orientations (SAO; Davidson, Beck, & Silver, 1999). The creation of items for the academic apathy factor ($\alpha = .70$, .73; test-retest coefficient = .68) was informed by the learning orientation-grade orientation perspective.

Reporting on the measurement characteristics of the SAO, Davidson et al. (1999) describe students high on academic apathy as uninterested in course work and concerned primarily with appearing successful rather than with actually learning. Sample items for the academic apathy dimension are “I try to work just hard enough to get the grade that I need in a course” and “I might cut class if I think that the lecture material will not be on the test.” Students with an academic apathy orientation tend to set minimal academic standards and fail to invest the energy required to attain high grades. In a follow-up study, the researchers compared student SAO scores to ratings on a series of personality measures (e.g., intrinsic motivation, extrinsic motivation, openness, independence, learning orientation, need for structure, self-assurance). Of the personality characteristics investigated, moderate correlations were found with academic apathy only for the learning (negative direction) and grade (positive direction) orientations.

However, two concerns arise with respect to the operationalization of academic apathy. First, the items assessing this dimension emphasize self-regulation and grade-related goals rather than appearance of success, inconsistent with the conceptual definition of academic apathy. Moreover, based on item content, academic apathy appears to closely parallel the work avoidant orientation described earlier in the literature (e.g., Meece, Blumenfeld, & Hoyle, 1988; Nicholls, Patashnick, & Nolen, 1985). For

these reasons, in lieu of further examination of academic apathy, a full description of work avoidance research is included in the section on apathy-related constructs.

Adolescent Apathy

Having concluded that adequate measures of academic apathy were not documented in the literature, Handelman (1999) developed and tested the Adolescent Apathy Inventory (AAI), which yielded high reliability and criterion validity. In his study, he defined apathy as a multidimensional trait characterized by lack of goal-setting behaviors, energy and interest, indifference to changes, and difficulty making decisions as assessed by self, teachers, parents, and friends. Although Handelman summarized the literature on apathy, he did not operate within a particular theoretical framework in creating and validating the AAI.

Handelman's (1999) AAI consists of 81 items organized into three sections. The first captures levels of agreement with statements regarding goals (e.g., "I want to go to college"), interests and cares (e.g., "I have school spirit" or "I care about environmental issues"), and attitudes (e.g., "I like to be the center of attention" or "I feel powerless around peers"). Behavioral dimensions are tapped by the remaining two sections, with an activities checklist (e.g., "attended a sporting event" or "gone to the movies") and frequency ratings for specific activities, states, or situations (e.g., "I lie around the house," "I feel disappointed in myself," or "I go to school sporting events"). The AAI yields normally distributed individual scores along a continuum from "not apathetic" through "highly apathetic," with low scores indicating high apathy.

Following pilot testing and minor modification of the measure, construct validity was assessed by comparing adolescents' AAI scores to their scores on the Reynolds

Adolescent Depression Scale (RADS; Reynolds, 1986) as well as to guidance counselor ratings of their apathy manifestation. A moderate correlation ($r=-.51$) in the expected direction was found between the RADS measure of depressive symptoms and the AAI. This finding indicates that while the construct(s) tapped by the AAI are not isomorphic to those revealed by the RADS, there is moderate overlap, with implications for a theoretical definition of apathy, as discussed later.

Over and above student self-reports of age, gender, grade level, ethnicity, and reported income, AAI scores were also compared to students' self-identified peer group categories (populars, athletes, burn-outs, high-achievers, loners, other) and Baumrind's (1971) parenting styles (authoritarian, authoritative, permissive). No significant mean differences were found for ethnicity, reported income, grade level, or age, although small yet significant correlations were found between age and AAI score ($r=-.14$) and grade and AAI score ($r=-.17$). Females reported significantly lower (more apathetic) scores than did males, and students who rated their parents as authoritative had significantly higher scores (less apathetic) than did students reporting permissive or authoritarian parents. There was no significant gender by parenting style interaction. Significant differences were found among peer groups, with "populars" and "athletes" combined reporting higher (less apathetic) scores than "loners" and "burnouts."

In addition to analyzing overall scores on the AAI, Handelman (1999) ran exploratory factor analysis on the AAI items to identify potentially distinct dimensions of adolescent apathy. Using principal components analysis with oblique rotation, he extracted five factors that ranged in intercorrelations between $r=.09$ to $r=.30$. High correlations were found between RADS scores and the third ("low self"; $r=-.72$) and fifth

(“inactive”; $r=-.60$) factors, which is unsurprising given the nature of items loading exclusively on those factors.

However, several aspects of the factor analysis are cause for concern. First, the resulting factors do not seem to represent distinct issues (e.g., (1) academic pursuits, caring about what happens to one’s self and others, behaviors; (2) social issues and friendships; (3) extra-curricular activities; (4) participation and interest in sports, participation and joining behaviors; (5) depressive symptoms, boredom, and disappointment in one’s self, goal-setting and goal-directed behaviors, difficulty in decision-making).

Second, nearly half (34) of the 81 items were retained on multiple factors such that scores for a given item contributed to more than one composite score; moreover, several items did not load on any factor but were nevertheless retained in the factor analysis. Further compromising the strength of the subscale identification was the inclusion of twelve dichotomous items, which are known to yield multiple factors due to statistical rather than substantive bias across items (Bernstein & Teng, 1989). The use of a matrix of tetrachoric inter-item correlations rather than Pearson correlations has been shown to correct the bias (Panter, Swygert, Dahlstrom, & Tanaka, 1997); however, it does not appear from the description of methods that such adjustments were made (Handelman, 1999). Consequently, while overall AAI scores may be valid indicators of an individual’s apathy, the validity of the dimensions identified via factor analysis are open to discussion.

Table 2 presents a subset of items drawn from the AAI. Only items loading on a single factor and having a load weight greater than .300 are displayed. Item numbers

Table 2

Suggested Modified Factor Structure for AAI

#	Item	G & H	D	LS	S	I
A02	I have career plans for after graduation	.428				
A05	I know what I would like to be when I am an adult	.426				
A08	I know which college I would like to attend	.399				
A18	I like to argue/debate about the topics which are important to me	.443				
A20	I am an ambitious person	.508				
A28	I am a creative and imaginative person	.548				
A29	I can make a difference in terms of changing school policies, affecting social and political issues	.500				
A38	I like reading (books, magazines, comics, etc)	.500				
B02	Read a novel, play, or short story	.385				
B05	Participated in a hobby	.310				
B10	Delivered a speech or performed in front of a group	.411				
B11	Provided a large amount of effort on a school project	.423				
B13	Performed some sort of volunteer/charitable service	.469				
B14	Written or recited long-or short-term goals for yourself	.426				
B15	Attended an event, organized by a religious or community organization	.319				
C23	I write stories or poems	.563				
A01	I want to go to college		.313			
A25	I don't care if I skip a day of school or class		.671			
A26	I am a disruptive person		.629			
C02	I drink alcohol		.689			
C03	I try to please my parents		.383			
C06	I use marijuana or other illegal substances		.704			
C17	I engage in mischievous/illegal behaviors		.732			
A33	I think that I am smart			.509		
A34	I have difficulty making decisions			.382		
C04	I lie around the house			.393		
C07	I let others take advantage of me			.512		
C08	I get sad or depressed			.590		
C09	I avoid being called on by teachers			.366		
C11	I feel bored			.572		
C13	I feel disappointed in myself			.662		
A03	I am good at one or more sports				.704	
A37	I would enjoy being on an athletic team				.813	
B01	Attended sporting event				.664	
B03	Competed on a sports team or in a personal sporting event				.730	
A11	I would rather sleep than go out with my friends					.308
A15	My friends think I am passive					.479
B09	Gone to the movies					.460

Note. G&H: Goals and Hobbies; D: Delinquency; LS: Low Self-Esteem; S: Sports; I:

Inactive

prefixed with “B” were scored dichotomously. Note that elimination of ambiguous items would result in somewhat different loadings.

In sum, work on the Adolescent Apathy Inventory (AAI) represents an important contribution to our understanding of apathy in young people. Notably, apathy in this operationalization is not cast as the absence of a positive construct, but is instead conceptualized as an independent affective construct manifest in a range of behaviors, emotions, and cognitive perceptions. Examination of the AAI subscales suggests that apathy as described by Handelman (1999) could be considered a multivariate construct comprising goal-setting, delinquency, and prosocial behaviors as well depressive symptoms. The literatures on these constructs and behaviors (e.g., Ford & Nichols, 1987, Wentzel, 1994) thus represent important avenues to pursue in sketching a holistic picture of apathetic students and associated deleterious effects on development, academic achievement, and well-being. Refinement of the AAI to include only the most informative items, using statistical analyses appropriate for both continuous and dichotomous items, represents one important aim of research to clarify apathy. In addition, further examination of construct validity using both convergent variables is warranted.

Apathy in Flow Theory

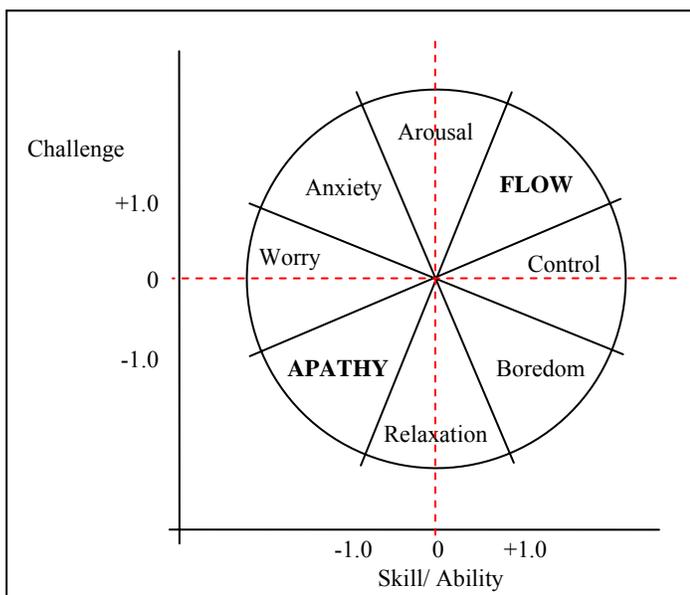
Apathy is one of several states defined by flow theory, which analyzes everyday experience in terms of the balance between perceived challenge and skill (Csikszentmihalyi, 1990; Csikszentmihalyi & Nakamura, 1989). Conditions that offer a high level of challenge well-matched to an individual’s skill or ability are likely to elicit

the optimal experience of flow, the experience of “losing oneself” in an activity.

According to Csikszentmihalyi, individuals’ experiences of flow are characterized by intense concentration, clear and direct task feedback, loss of self-consciousness, sense of control, and intrinsic reward. Other challenge-skill combinations define additional states, called “channels,” such as “anxiety” and “relaxation.” As shown in Figure 6, flow theory casts apathy as the opposite of optimal experience, activated by the subjective perception of low challenge and low skill for the current activity.

Figure 6

Flow Theory Plotted as Eight Ratios of Challenge to Skill



Note. Graphic representation of the 8-channel flow model, adapted from Delle Fave and Bassi, 2000. Scores on each axis are standardized within-person, such that the 0 point indicates the mean level of skill or challenge for the participant. Each segment represents a channel, defined as the balance of perceived challenge and perceived skill. Flow state is considered active when the participant perceives both high skill and high challenge for the activity at hand. In contrast, participants are classified in the apathy channel when perceived skill and challenge are both low.

The number of challenge-skill states based on within-person standardized scores varies across studies, ranging from four to nine. Since by definition, all states, or “channels,” in the model are mutually exclusive, it is not possible to experience multiple states simultaneously. Thus, apathy from the perspective of flow theory could also be considered the absence of the positive state of flow, rather than a construct that assumes values independent of other dimensions of experience. Moreover, state-like definitions closely associate the various flow channels with a specific activity.

Methods employed in the study of flow focus on momentary experience, using an innovative data-gathering technique called the Experience Sampling Method (ESM; Larson & Csikszentmihalyi, 1978, 1983). For a full week, participants carry pagers or watches programmed to activate daily at several randomly selected times during waking hours. At each notification, the participant fills out one of the forms provided; all forms are collected at the end of the participation period. Any forms filled out considerably after the notification or left mostly unanswered are dropped from analysis. Some researchers have adopted variations of this method, collecting single or a handful of samples of experience, and defining states based on sample rather than individual means (e.g., Konradt, Filip, & Hoffmann, 2003).

A total of 8 studies investigating flow met the criteria for inclusion in the present review. Three major findings emerge from these studies. First, consistent with hypotheses, the apathy state is negatively associated with a range of well-being markers such as happiness, involvement, wish to do activity, and concentration. Second, both main and interaction effects appear across contexts for the relation between flow state

and quality of life indicators. Finally, a large portion of the variance observed in quality of life variables remains unexplained by flow theory.

Flow and Well-Being

Haworth and colleagues (Clarke & Haworth, 1994; Haworth & Evans, 1995) examined the relation between flow experiences and enjoyment for samples of adolescents in England. In both studies, the apathy channel, defined by these researchers as low challenge that exceeded skills, was associated significantly with negative aspects of experience, such as low happiness and interest. Konradt and colleagues (2003) investigated flow experience during hypermedia learning and found that participants who reported balanced and high levels of challenge and skill following free navigation time also reported higher levels of contentment.

Similarly, Moneta and Csikszentmihalyi (1996) studied a sample of talented United States adolescents to assess the extent to which challenge, skill, and flow state predicted quality of experience as described by happiness, concentration, involvement, and wish to do the activity. Quality of daily experience was found to positively associate with subjectively rated challenge and skill, and a balance between challenge and skill was observed to further enhance the quality of experience.

Delle Fave and Bassi (2000) examined the relations among daily activities, dimensions of quality of life (e.g., mood, engagement, confidence, and intrinsic motivation) and flow state, operationalized according to Moneta and Csikszentmihalyi (1996, 1999). Focusing their data analyses on the flow and apathy channels, they found that watching television was related to lack of goals and engagement, and served as a source of apathy for their sample adolescents in Italy. In contrast, activities such as

studying at home and socializing were more strongly associated with flow experiences. With some exceptions, dimensions of quality of life were significantly associated with flow and apathy in the expected directions. However, engagement, unself-consciousness, and goals were significantly and positively associated with the apathy state for studying at home. Findings from this study thus present a conflicting picture of quality of experience variables associated with different flow states across activities.

Flow and Context

The second major finding is that context interacts with flow channel membership to predict well-being. Moneta and Csikszentmihalyi (1996, 1999) found that the imbalance of challenge and skills was associated with a reduction in concentration and involvement in the school context, but not in the family or friends contexts. That is, participants were more likely to report discrepant challenge and skill scores together with lower scores in the quality dimensions of concentration and involvement in school than they were with family and friends.

Flow and Variance Explained

Finally, flow researchers note that while informative, the challenge-skill balance nevertheless does not explain a substantial portion of variance in well-being indicators. In Moneta and Csikszentmihalyi's (1996, 1999) study of talented adolescents, the regression intercepts differed significantly between contexts, indicating that challenge, skill, and their relative balance do not offer sufficient evidence for explaining variability in quality of experience between contexts.

Summary

In sum, individuals in situations characterized by perceived low challenge and low skill tend to report lower levels on a range of quality of experience variables such as enjoyment, concentration, and motivation. However, associations between these indicators vary across contexts, with the school context emerging as particularly sensitive to the balance of perceived challenge and skill. Findings indicate that while the perceived challenge-skill balance used by flow theory to define channels of experience does explain some of the variance in measured outcomes, considerable variance remains unexplained and thus indicates that other variables are in play. A related measurement issue concerns the use of within-person standardized scores to determine flow state, which potentially masks individual differences in frequency of flow experience.

Since apathy in flow theory is focused on specific tasks and based on multiple data collection points, it is unlikely that flow state data collected at one point in time regarding overall school experience would yield meaningful results. However, the work by Csikszentmihalyi and other flow theorists presents three important considerations for the present study. First, their work indicates that outcome variables beyond academic achievement are important to investigate as correlates of motivation. Second, given the moderating role of context documented by their research, it is necessary to clearly and consistently delineate the context for the present study. Third, findings from flow theory argue in favor of employing data generation methods such as interviews that offer the possibility to probe students' perceptions of the extent to which low challenge and low skill consistently characterize their experience in school. This latter component of

research methodology would allow evidence of a persistent state of school-related apathy to emerge even in the absence of experience sampling.

Apathy in Logotherapy

Apathy also emerges within the research on logotherapy, a clinical approach based on existential philosophy. Logotherapy was pioneered by Frankl, a concentration camp survivor and clinical psychiatrist, who defined apathy as “the blunting of the emotions and feeling that one could not care anymore” (1946/1962, p. 21). He observed an existential vacuum among clients in his clinical practice and hypothesized that in the absence of a sense of purpose and meaning in life individuals may develop what he labeled *noogenic neurosis*, which is manifested in apathy and boredom (Crumbaugh & Maholick, 1964).

Most logotherapy studies published in the peer-reviewed literature focus on the relation between meaning in life and psychological well-being. Based on Frankl’s theory, the Purpose in Life Test (PIL) was developed by Crumbaugh and Maholick (1964) and subsequently refined by Crumbaugh (1968) to assess the level of an individual’s sense of purpose in life. Those suffering from noogenic neurosis were expected to obtain low scores on the measure, with apathy considered a potential consequence of individuals’ low perceptions of meaning.

A search of the literature identified only two studies aimed at assessing levels of student apathy operationalized as scores on the PIL. Coffield and Buckalew (Coffield, 1981; Coffield & Buckalew, 1986) analyzed data collected at two time points from independent samples of high school and college students and, contrary to the notion that apathy has been on the rise, found no significant differences. However, the researchers

did not provide a definition of apathy and the operationalization of apathy by scores on the PIL is subject to critique, since apathy was theorized to be related to the purpose in life construct and not equivalent to it (Crumbaugh, 1968; Crumbaugh & Maholick, 1964).

Nevertheless, research on the PIL and Frankl's theory suggest that perceived meaning in life may be associated with adolescents' levels of apathy-related constructs. Research into apathy and its roots should therefore include methodologies that allow evidence of meaninglessness to emerge if present. To date, the PIL has only been validated with adults, and contains items inappropriate for use with young adolescents. The development of an adolescent-PIL would enable comparisons to other measures of apathy and allow for validation of the claim made by logotherapy for an adolescent population.

Apathy Syndrome

Marin and colleagues (1990, 1991, 1997a, 1997b; Marin, Biedrzycki, & Firinciogullari, 1991), working within a psychiatric disorders framework, define apathy as a state of primary motivational impairment that cannot be attributed to diminished level of consciousness, cognitive impairment, or emotional distress. Like Handelman (1999), their conceptualization takes its cue in part from the work of Atkinson and others (Atkinson & Reitman, 1956), who define motivation in terms of goal-directed behavior. The apathetic individual manifests simultaneous reduction in the emotional, behavioral, and cognitive aspects of goal-related behavior (Marin, 1991, 1997a; see Figure 7). Although apathy may be comorbid with neurological disorders, its behavioral, cognitive, and emotional characteristics distinguish it from similar or related syndromes such as abulia, akinesia, delirium, dementia, depression, and despair and demoralization.

Figure 7

Criteria for the syndrome of apathy

The essential feature of the syndrome of apathy is diminished goal-directed activity due to lack of motivation.

- A. Lack of motivation, relative to the patient's previous level of functioning or the standards of his or her age and culture, as evidenced by all three of the following:
 - 1. Diminished goal-directed over behavior as indicated by:
 - a. Lack of productivity
 - b. Lack of effort
 - c. Lack of time spent in activities of interest
 - d. Lack of initiative or perseverance
 - e. Behavioral compliance or dependency on others to structure activity
 - f. Diminished socialization or recreation
 - 2. Diminished emotional concomitants of goal-directed behavior as indicated by:
 - a. Unchanging affect
 - b. Lack of emotional responsivity to positive and negative events
 - c. Euphoric or flat affect
 - d. Absence of excitement or emotional intensity
- B. Lack of motivation is the dominant feature of the clinical presentation. If lack of motivation is not the dominant feature, then apathy is a symptom of some other syndrome such as dementia, delirium, or depression.

Note. Adapted from Marin, 1991.

Importantly, apathy can present as selective adaptation to socioenvironmental factors rather than as a result of neurological pathology (Marin, 1997a, 1997b; Marin, Fogel, Hawkins, Duffy, & Krupp, 1995).

Marin has pioneered work on defining and investigating apathy as a psychiatric disorder characterized by the reduction or absence of motivation across cognitive, behavioral, and emotional dimensions (Marin, 1990, 1991, 1997a). Marin and colleagues report on the development, reliability and validation of the Apathy Evaluation Scale (AES), aimed at distinguishing patients whose overall clinical state is characterized by

apathy from those in whom apathy presents as a symptom signaling another syndrome, such as delirium, dementia, or depression (Marin, 1997b).

Versions of the measure were created for clinician, informant (e.g., family member, caregiver, or friend), and client, to provide a broad base of data for examining construct validity. Construct validity was tested using a multitrait-multimethod matrix procedure (Campbell & Fiske, 1959; Crocker & Algina, 1986), in which apathy, depression, and anxiety were each evaluated using paper-and-pencil and interview methods. Resulting convergent validities were within expected ranges (Marin et al., 1991). However, informant scores tended to produce inadequate levels of convergent validity.

Although Marin and colleagues have focused their study of apathy within an elderly population diagnosed with neurological disorders such as Parkinson's and Alzheimer's (Marin et al., 1991), the finding that some individuals evidence apathy due to psychological and socioenvironmental causes (e.g., Marin, 1997b) such as retirement has import for understanding apathy in adolescents, whose lives are rife with physical changes as well as socioenvironmental transitions. Also relevant is the manifestation of persistent selective apathy for particular activities in otherwise normally functioning individuals (Marin, 1990). For instance, there may be a milder form of apathy that presents during development and influences a range of social and academic outcomes. Thus there is a need for research into this possibility, as well as empirical data to examine the sensitivity of the AES to selective adaptive apathy in adolescents resulting from psychosocial and environmental mechanisms.

Summary of Apathy Constructs

In sum, five apathy constructs were identified and reviewed for their potential to reflect school-related apathy. Looking across these constructs, some distinguishing features are already evident with respect to the purposes of the present review. First, apathy has been conceptualized either as an enduring individual trait (e.g., adolescent apathy, academic orientations) or as a state resulting from the interaction between individual characteristics and perceived contextual factors (e.g., flow theory). Second, apathy has been identified as a psychiatric disorder distinct from other syndromes (e.g., Marin, 1997a). Third, some researchers consider apathy in the context of a larger conception of psychological health (e.g., logotherapy). Finally, apathy is defined in terms of subjective cognitive perceptions (e.g., flow theory, academic orientation), emotion (e.g. logotherapy), or behavioral, cognitive, and emotional symptoms (e.g., apathy syndrome, adolescent apathy).

The review of research on and operationalization of academic apathy indicated that this construct closely reflects the work-avoidance goal orientation defined and studied earlier in the literature. Therefore the present study will draw on the latter, discussed in the following section, to investigate this conceptualization of apathy in adolescents.

The work of both Marin and Handelman suggests that apathy plays out across behavioral, cognitive, and emotional dimensions of adolescents' lives. Measurement concerns advocate developing a shorter form of the AAI to more effectively identify apathetic adolescents and ascertaining whether the AAI offers increased parsimony over a composite measurement of other variables. Further, the AAI is general rather than

focused on the school context. Given findings from flow theory regarding the moderating role of context, it will be important to explore whether adolescent apathy takes on variable expressions between school and non-school contexts.

The research of Marin and colleagues on apathy as a syndrome offers an important complement to understanding the AAI, since the AES, while not yet validated with adolescents, consists of items appropriate for that age group and is based on rigorous clinical and theoretical investigations of apathy. An important contribution of the present study was to ascertain the degree of overlap between these two operationalizations of apathy, as well as their relation to other apathy-related constructs.

Research on these constructs offers some evidence of conceptual and operational overlap. However it remains to be understood whether the apathy described by teachers and even researchers is exhaustively captured by these approaches. Moreover, for some of these apathy constructs, the question arises as to consistency between conceptual and operational definitions.

Regarding associated variables, the research on flow theory demonstrates the importance of extending correlates of apathy beyond academic achievement to encompass well-being variables, and to investigate the roles of challenge, skill and their balance in eliciting variations in adolescent motivation in school. Further, logotherapy suggests that adolescents who do not perceive the meaning of their lives may experience apathy. Therefore both the development of an adolescent PIL and explorations of its relation to apathy represent directions for future research.

Apathy-Related Constructs

Beyond constructs labeled apathy, the research literature offers additional insights

via constructs bearing alternative labels. Therefore, to capture the full range of conceptualizations poised to inform a characterization of apathy, a wider net was cast to include apathy-related constructs. Five apathy-related constructs were identified: amotivation, boredom, disengagement, learned helplessness, and work avoidance. Alienation and anomie were excluded since their conceptualizations suggest potential correlation, rather than equivalence, to apathy. Specifically, alienation has been defined in terms of sense of powerlessness and self-estrangement. Anomie is descriptive of society rather than of individuals, and is defined as normlessness, either in terms of deviation from accepted rules or customs or as a lack of clear rules for behavior (Seeman, 1991).

Amotivation

Amotivation is defined within the literature on self-determination theory (SDT; Deci & Ryan, 1985b; Ryan & Deci, 2000a), a macrotheory of motivation that posits three basic innate psychological needs for autonomy, competence, and relatedness common to all human beings. A central claim of SDT is that psychological health will not be experienced if any of these three needs is not met in the individual's sociocultural context (Deci & Ryan, 2000). Organismic integration theory (OIT), a subtheory of SDT, describes how individuals internalize the reasons and locus of causality for extrinsically-motivated behaviors (Deci & Ryan, 2000). SDT distinguishes the content of goals from the mode of goal pursuit, with OIT describing states of motivation on a continuum—ranging from amotivation to four forms of extrinsic motivation and intrinsic motivation—and defined by different regulatory processes and perceived locus of control (see Figure 8).

The state of amotivation is defined as lack of intention to act resulting from lack

of valuing or feeling of competence for the activity (Ryan & Deci, 2000b). Individuals experiencing amotivation lack motivation and self-determination with respect to a target behavior (Deci & Ryan, 2000). Baldwin and Caldwell (2003) define amotivation in terms of nonintentional and nonregulated behavior. Alternatively, Cokley (2000) emphasizes amotivation resulting from the perception that behavior is caused by forces out of one's control and will not yield a desired outcome.

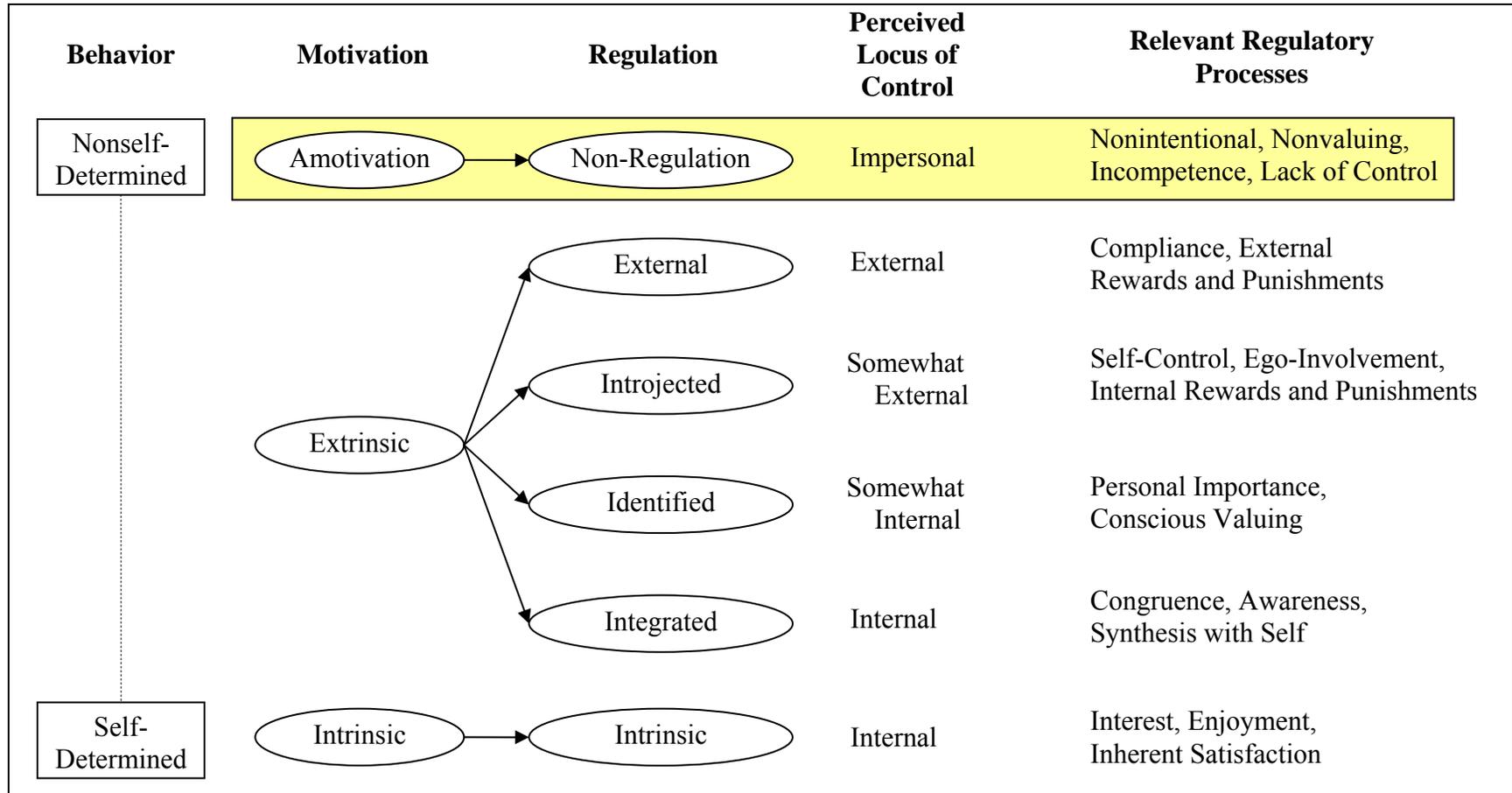
Amotivation may also be considered a general orientation or trait. Deci and Ryan (1985a) define causality orientations as enduring tendencies characterizing the degree to which behavior is self-determined. The three orientations are autonomy, control, and impersonal. This latter orientation was labeled amotivation in a study by Lee, Sheldon, and Turban (2003), who suggested that this term better reflects the meaning of the trait, defined by Deci and Ryan (1985a) as an enduring tendency to experience behavior as beyond intentional control. Those with a strong impersonal, or amotivation, orientation tend to see themselves as incompetent and unable to regulate their behavior to achieve desired outcomes. Overall, conceptual definitions of amotivation across several studies reflect consistency and emphasize an individual's lack of intention to act, perception of not being in control of behavior and a concomitant lack of behavior regulation.

Measures and Findings

Several measures of regulatory styles have been developed that reflect the SDT perspective, however only a subset of these includes amotivation (Vallerand, Pelletier, Blais, Brière, Senécal, & Vallières, 1992). These measures tap from three to six regulatory styles and range in focus from situational state, to academic orientation over time, to general orientations akin to personality traits.

Figure 8

Self-Determination Continuum



Note. Adapted from Ryan and Deci (2000a).

Targeting a general level of motivation in academic settings, Vallerand et al. (1992, 1993) developed and tested the Academic Motivation Scale (AMS), translated from the original French version into English, with several samples of college students. Four of the original SDT motivation types were tested, with intrinsic motivation (IM) further differentiated into three factors: IM-accomplishment, IM-knowledge, and IM-stimulation. Four Likert-scale items, shown in Table 3, constitute the amotivation subscale. Confirmatory factor analysis of the 7-factor model yielded acceptable fit indices.

This measure was subsequently used with a sample of American college students by Cokley (2000), who tested for construct validity by examining the correlation patterns among factors in light of SDT. According to the theory, motivation orientations adjacent on the continuum should be more highly correlated, with magnitude and valence of correlations reflecting distance on the continuum. Although the types of extrinsic motivation were found to be positively and significantly intercorrelated, introjected regulation correlated more highly with intrinsic motivation than did identified regulation, suggesting that introjected regulation may be more self-determined than had been conceptualized (See Figure 8).

Building on the work by Vallerand and colleagues (1992, 1993), Guay, Vallerand, and Blanchard (2000) developed the Situational Motivation Scale (SIMS) to tap motivation for a specific activity according to four levels—intrinsic, identified, external, and amotivated—of the self-determination continuum. Table 3 shows the four items that make up the amotivation subscale. In exploratory factor analysis all four dimensions emerged, explaining 65% of the variance. However, the amotivation factor had an

Table 3

AMS and SIMS Amotivation Subscale Items

Academic Motivation Scale (AMS; Vallerand et al., 1992; $\alpha = .85$)

Why do you go to school?

1. Honestly, I don't know; I really feel that I am wasting my time in school.
2. I once had good reasons for going to school; however, now I wonder whether I should continue.
3. I can't see why I go to school and frankly, I couldn't care less.
4. I don't know; I can't understand what I am doing in school.

The Situational Motivation Scale (SIMS; Guay et al., 2000; $\alpha = .77$)

Why are you currently engaged in this activity?

1. I do this activity but I am not sure if it is worth it.
 2. There may be good reasons for engaging in this activity, but personally I don't see any.
 3. I don't know; I don't see what this activity brings me.
 4. I do this activity, but I am not sure it is a good thing to pursue it.
-

eigenvalue well below 1 (.73) and only explained 4.5% of the overall variance. Confirmatory factor analysis with a different sample of college students yielded acceptable fit of the 4-factor model. Focusing instead on the application of SDT to understanding adolescents' motivation outside school, Baldwin and Caldwell (2003) developed a free time motivation measure. Though they found support for the simplex structure among the five motivational dimensions (the integrated dimension was not assessed in their study), the authors characterize the model fit as minimally acceptable.

Given the emphasis in self-determination on individuals' reasons for engaging in activities, it is not surprising that the content of the amotivation subscale items revolves around whether respondents see reasons for going to school or engaging in specific academic tasks. However, it is not clear whether a construct thus operationalized is appropriately labeled amotivation. Although amotivation is defined as unwillingness or lack of intention to act (Ryan & Deci, 2000a), two of the four SIMS items indicate that the person is doing the activity. Further, the amotivation items on the SIMS and AMS confound caring with purpose. Amotivation operationalized with these items may not necessarily be accompanied by lack of control over the situation or lack of competence to succeed at the activity. Perhaps this construct is better understood in terms of the meaning individuals perceive for engaging in school or academic tasks, while a separate construct would capture other salient aspects such as sense of competence, behaviors, and valuing (Wigfield & Eccles, 2000).

Focusing on aspects of the individual rather than on particular activities or contexts, Deci and Ryan (1985a) developed the General Causality Orientations Scale (GCOS) to identify enduring tendencies to perceive events as either controlling,

informational, or amotivating. Items on this measure tap three orientations: autonomous, controlling, and impersonal, with labels reflecting type of self-determination. Twelve vignettes reflecting a diverse set of scenarios (e.g., exam performance, parenting, work, socializing) each with three associated questions, make up the measure; respondents indicate level of agreement for all items, resulting in a composite score for each orientation. In studies with undergraduates and working adults, internal consistency and temporal stability were both found to be satisfactory. Correlations between orientations ranged from .02 to .15, whereas inter-item correlations within each orientation ranged from .34 to .60. Further support for construct validity was found in significant correlations with other personality measures in the theorized directions.

Associations with Other Variables

Several studies include the motivation orientations or levels of SDT in their analyses, ranging from the three basic dimensions of intrinsic motivation, extrinsic motivation, and amotivation to a model that includes all six variations, shown in Figure 8. For example, Guay et al. (2000) examined the relation between situation-based motivational state, the determinants of perceived competence and autonomy support, and the consequences of emotions and task interest. In path model analyses, support was found for the theory that perceived competence and autonomy support was indirectly related to task interest and emotion through motivation state. However, as noted earlier, the amotivation factor on the situational measure did not account for substantial variance. Moreover, in replication studies reported in the same article, this factor was found to be fairly unstable over measurement times.

Vallerand et al. (1992) examined associations between motivational orientation

and antecedents and consequences consistent with SDT and reported that amotivation was significantly and negatively correlated with concentration in class, positive emotions in class, academic satisfaction, reported grades, and schooling intentions. Although no gender differences were found for amotivation composite scores, females reported significantly higher mean composite scores within the orientations closer to intrinsic motivation. Similarly, females reported higher motivation than did males in a study of college students enrolled in a compulsory course (Vallerand & Bissonnette, 1992). Motivation levels as reported on the AMS at the start of the semester predicted course persistence, with females having higher persistence than males. Vallerand et al. (1993) found moderate support for relations between amotivation and motivational antecedents such as perceived competence and optimism in education. Low correlations between aspects of classroom climate and the AMS subscales were also observed.

Noels, Pelletier, Clement, and Vallerand (2003) compared second language learning orientations in Canadian college students to scores on the self-determination motivation continuum, and additionally examined antecedents and consequences of self-determination. Composite scores on the amotivation factor were significantly correlated with the freedom of choice ($r=-0.49$) and perceived competence ($r=-0.23$) antecedents, as well as with the intention to continue ($r=-0.57$) and anxiety ($r=0.17$) consequences. Senécal, Koestner, and Vallerand (1995) compared students' scores on the self-determination motivation continuum to procrastination levels among junior college students in Canada and found a significant negative correlation between intrinsic motivation and procrastination.

Linking the family and school contexts, Leung, Kwan, and Kim (1998) explored

motivational orientations as mediating the relation between parenting styles and perceived academic competence. Among the sample of 8th and 9th grade students in Hong Kong, they found support for three hypothesized pathways of parenting to motivation: authoritarian to extrinsic, authoritative to intrinsic, and neglectful to amotivation; motivational orientations were in turn associated with perceived academic competence in the hypothesized directions. The data also revealed evidence of a pathway between authoritarian and amotivation.

Only two studies were found that explored Deci and Ryan's work on causality orientations in educational settings. Lee et al. (2003) tested a model linking general causality orientations to enjoyment and performance outcomes through an intervening goal-striving process defined in terms of achievement goal patterns, goal level, and mental focus. The impersonal, or amotivation, orientation positively related to performance-avoiding goals, which in turn were negatively associated with both goal level and mental focus. The observed positive relation between mental focus and both enjoyment and performance completed the path from amotivation to outcomes in the model, in which all paths were significant and model fit indices were satisfactory.

This work followed earlier investigations by Koestner and Zuckerman (1994) who explored similarities between Deci and Ryan's causality orientations theory and Dweck and Leggett's (1988) social-cognitive theory of achievement, and found support for substantial overlap between learning- and performance-orientations and regulatory styles. Specifically, moderate support was found in a college student sample for the hypothesis that performance goals coupled with low confidence represent a special case of the impersonal (amotivation) orientation. In a second study of college students, the predicted

interaction between orientation and response to positive and negative task feedback was found. Whereas autonomous individuals' mean levels of motivation did not vary in response to success or failure, controlled individuals demonstrated significantly higher motivation in the failure condition over the success condition. In contrast, individuals with an impersonal orientation reported somewhat higher mean task motivation in the success condition. That is, individuals manifesting impersonal orientations responded to negative feedback similarly to helpless individuals in the conceptualization of Dweck and Leggett.

Summary

As these studies suggest, while amotivation can assume a state manifestation, as well as selective or general trait appearance, most studies in educational settings focus on motivation orientations for academic tasks and represent substantial consistency in conceptual and operational definitions. Empirically and conceptually, this strain of motivation has been closely bound to perceived lack of control and lack of competence as antecedents which yield a lack of intention to engage in a given task. Regarding the potential of amotivation to inform an understanding of apathy, in light of operationalization concerns, further research should distinguish between lack of meaning or reasons for engaging in an activity and lack of valuing or care for that activity. The fact that minimal variance in motivation is explained by the amotivation factor relative to the other SDT factors suggests that measurement and conceptual problems may also need addressing.

Amotivation is associated with several variables salient to academic tasks. However, the majority of studies have been conducted with college students. Thus among

directions for further research are studies that target students in younger grades. This extension of the research may necessitate refinement of measures for use with younger participants. Evidence of antecedents and consequences suggests that longitudinal studies are appropriate to better understand the development of an amotivation orientation. Given that some support was found for the relation of context to motivation, additional research linking motivation to classroom environment is warranted. Findings from these studies suggest similarity to other constructs such as learned helplessness or low self-efficacy. Thus, future investigations into the overlap and unique contributions of constructs in service of a more parsimonious and practically informative understanding of apathy in adolescents are also necessary.

Boredom Proneness

Focused on affective state rather than on observable behavior, boredom has been defined as a state of relatively low arousal and dissatisfaction (Mikulas & Vodanovich, 1993). In addition to a state definition that attributes boredom to an inadequately stimulating environment, researchers have examined boredom proneness as a individual trait (Harris, 2000; Vodanovich & Kass, 1990). Early work on boredom led to the development of the 28-item Boredom Proneness Scale (BPS; Farmer & Sundberg, 1986). Subsequently, Vodanovich and Kass (1990) examined the factor structure of the BPS and, consistent with prior research, found evidence of a five-dimensional construct. The first two factors reflect state-trait dimensions, with External Stimulation (state) representing the influence of environment or situational characteristics on boredom, and Internal Stimulation (trait) capturing an individual's ability to stay interested and entertained. The five factors extracted in exploratory factor analysis accounted for 43%

of the variance, with the first two alone explaining 29%, suggesting that additional dimensions are not strong aspects of boredom proneness.

Using the BPS, Shaw and colleagues (Shaw, Caldwell, & Kleiber, 1996; Shaw, Kleiber, & Caldwell, 1995) found that adolescent boys in a working class Ontario school who reported boredom at school were also more likely to report it at home. They also found that boredom differed by subject matter as well as teaching style. Taken together, these findings tell a complex story, in which individual and group differences play out across contexts, while context, defined by subject matter and teaching style, also exerts influence on individuals' boredom levels. Moreover, these researchers also found that boys reporting more boredom also reported higher levels of stress.

In the context of a broader study of adolescent experience, Sax, Lindholm, Astin, Korn, and Mahoney (2001) found that over 40% of a national college freshman sample reported frequently feeling bored in class during their senior year of high school. This trend appears to follow students into college. Harris (2000), investigating correlates of boredom and boredom proneness, reported that in an open-response question format, over a third of college students surveyed identified classes/lecture as a cause of boredom. Harris also examined the relation between boredom proneness and tendency to experience flow, finding support for the hypothesized negative relation between the two. Examining relations between psychosocial development and boredom proneness using BPS scores among college students, Watt and Vodanovich (1999) found support for their hypothesis that boredom proneness was significantly and negatively correlated with four measures of psychosocial development adapted from Chickering's vectors: establishing

and clarifying purpose; developing autonomy; mature interpersonal relationships; and salubrious lifestyle (Chickering, McDowell, & Campagna, 1969).

Overall, theoretical and empirical articles conceptualize boredom as an unpleasant state associated with dissatisfaction. From an optimal arousal perspective, it is assumed that individuals attempt to increase levels of stimulation in order to escape the state of boredom (Harris, 2000; Mikulas & Vodanovich, 1993). Given the associated experience of negative affect and increased activity in response to boredom, it is fair to conclude that this construct does not represent a close synonym to apathy, which on the contrary would be characterized by a *lack* of affect.

Nevertheless, data indicating high levels of boredom reported for class time suggest that there is room for enhancing features of classroom context that foster positive affect. Research that teases apart the differences in student and teacher characterizations of boredom in comparison to apathy would shed light on the conceptualizations of each construct and allow for research into their temporal relation. For instance, boredom may precede apathy, particularly when elicited by environmental rather than individual characteristics, in which the individual decides to reduce the discomfort of low stimulation by toning down the value of stimulation. Thus longitudinal and carefully designed experimental studies may reveal whether extended exposure to non-stimulating environments fosters apathy.

Disengagement

Across multiple studies, disengagement is consistently defined in terms of low or decreasing participation in mandatory as well as extracurricular school activities, such that total disengagement coincides with school dropout (Fredricks et al., 2004). Although

much diversity exists among dropouts, common manifestations include truancy, course failure, and credit deficiency toward graduation prior to dropping out. Concern over dropout rates has prompted investigations into antecedent behaviors collectively labeled disengagement.

Rather than designing specific measures of disengagement, sets of variables theoretically justified to indicate disengagement are typically used in this area of research. To capture the complexities inherent in explaining and predicting disengagement, some researchers adopt a person-context-process perspective.

Failure for most students is better seen as a process of mutual rejection by the student and the school. This mutual rejection develops from an interaction of a number of conditions, some of which are characteristics of the students, but others are institutional characteristics. Disengagement from school should be seen as an interactive process rather than as some fundamental mental inability or social flaw in the backgrounds of students. (Wehlage, 1989, p. 58)

Wehlage (1989) categorizes the problems of engagement in modern schools according to achievement and reward disjuncture, a narrow conception of school learning, and vast content coverage in a superficial, trivial curriculum. However, the research necessary to document such claims is daunting, and the literature reflects this in that most studies are simpler investigations of particular elements of these processes and interactions. For example, Verkuyten and Brug (2003) investigated disengagement in terms of educational performance, perceived discrimination by teachers, and diagnosticity of feedback. Although levels of disengagement were comparable across

their sample of Dutch adolescents, the processes differed, with perceived discrimination playing a larger role for ethnic minorities than for majority students.

The transition to high school was found to engender increased disengagement among students in a low-income urban population in the United States (Seidman, Aber, Allen, & French, 1996), as evidenced by reports of decreased extracurricular involvement, decline in perception of social support from school personnel, and slight increase in perceived academic demands and hassles encountered in school. Interestingly, no gender or ethnicity interactions were found in this study, although other studies have found gender differences in changes accompanying school transition (Stipek, 1996; Wigfield & Eccles, 2002).

Roderick and Camburn (1999) found a strong relation between 9th grade course failure and school dropout, concluding that many students do not recover, particularly given the declines in student school performance, involvement and perceptions of quality of school environment over the transition to high school. Repeating a grade has also been found to increase the likelihood of dropping out, even after differences in background, grades following retention, and attendance were taken into account (Roderick, 1994). The researcher attributed this finding to the over-age of students held back a grade.

Citing the substantial research base indicating that premature entry into adult roles can result in problem behaviors in adolescents, one study examined interrelations among students' educational engagement, desired and actual school-year employment, substance abuse, and other problem behaviors in a sample of 300,000 8th-, 10th-, and 12th-grade US students from 1992 to 1998 (Bachman, Safron, Sy, & Schulenberg, 2003). Their analysis revealed that the number of hours students preferred to work each week related more

strongly to educational disengagement than did actual work hours, providing another window into understanding the relation between student employment commitments and negative behaviors such as school disengagement.

A number of studies have investigated the degree to which characteristics that emerge early in individuals' development, such as cutting class and disruptiveness, might serve as warning signals for future dropout and disengagement. In a qualitative study of urban high schools (Fallis & Opatow, 2003), students reported cutting class to "avoid classes they dislike, see as too hard or too easy, or for which they are unprepared; to avoid particular peers or teachers with whom they are engaged in conflict; to attend to personal matters; as well as for a variety of other reasons" (p. 104). Fallis and Opatow argued that cutting class is an antecedent to dropping out of school, through a progression in which test days are skipped, leading to a decline in grades, course failure, and slowing of academic progress.

Similarly, Vitaro, Larocque, Janosz, and Tremblay (2001) found that early disruptiveness and early academic performance predicted dropping out for a sample of low-SES males followed longitudinally from age 6 to 17. They considered a range of peer-related variables such as unpopularity/friendlessness and deviant friends within a developmental model integrating personal (behavioral & academic) and socio-family (demographic and family practices) variables. On all variables except parental support, significant differences between dropout and non-dropout students were found. Alexander, Entwistle, and Kabbani (2001) also found that early predictors were nearly as strong as late predictors of dropping out, which they perceived as the end point of a long process of disengagement from school.

In sum, research in disengagement reflects considerable consistency in a behavioral operationalization comprising a set of antecedents, and findings suggest that once a disengaged individual is identified, it is possible to trace the warning signs back to the early years. Documentation of these warning signs would allow for early interventions that avert deleterious outcomes. However, prediction remains more elusive, as antecedents are more properly characterized as risk factors. A process approach is advocated by several researchers to take into consideration the wide range of nested influences that may interact to produce varying levels of disengagement.

Regarding the potential link to apathy, disengagement may be the consequence of a process that initiates with emotional and cognitive features of apathy bound to both individual and socioenvironmental factors and develops into a behavioral manifestation which in extreme forms leads to dropping out of school. Longitudinal research is necessary to establish a temporal sequence linking apathy and disengagement, however cross-sectional investigations represent an initial step in this direction by identifying whether relations are present between disengagement and apathy. The work of researchers such as Finn and colleagues (e.g., Finn & Owings, 1994; Finn & Rock, 1997) on relations between family and social variables and engagement serves to inform this research goal.

Learned Helplessness

The large body of literature describing the motivation orientation “learned helplessness” reflects considerable consistency across conceptual definitions. Linked to reasons students give for failure at academic tasks, learned helplessness refers to the repeated attribution of stable, internal causes for failure, such that individuals perceive a

noncontingency between their actions and outcomes (Burhans & Dweck, 1995; Peterson, 1992). Learned-helpless individuals display reluctance to attempt work, do not engage in opportunities to improve cognitive abilities, such as practicing, and often experience affective problems as well such as depression, anxiety, and listlessness (Alloy & Seligman, 1979).

Learned helplessness has received much attention in the literature, possibly because it is a target of interventions such as attribution training and has also been shown to relate to a set of affective, cognitive, and motivational deficits. Peterson (1992) linked learned helplessness to underachievement and absenteeism. Boggiano et al. (1992) integrated intrinsic motivation, as described by self-determination theory, with learned helplessness research to propose a model in which “frequent and repeated exposure to controlling techniques would have dramatic and far-reaching effects on the formation of maladaptive achievement patterns in students” (p. 274). Support was found for this model, even after covarying out prior achievement scores. Further, support was also found for the hypothesis that the performance of students with an extrinsic motivation orientation declines when they are repeatedly exposed to failure coupled with teachers’ controlling strategies. In contrast, students with an intrinsic motivation orientation are likely to thrive when faced with teachers’ evaluative or controlling feedback in a failure situation.

Drawing on Dweck’s research into the relation between motivational orientation, ability beliefs (e.g., fixed, malleable), and performance situation behavior patterns, Dresel (2001) longitudinally studied 6th-to 9th-grade college preparatory students in Germany over an academic year. Start-of-year measures of academic self-concept (ASC),

performance orientation interaction with ASC, learning orientation, and the learning orientation interaction with ASC accounted for over half the variance in start-of-year internal stable failure attributions. In contrast, end-of-year measures were able to account for slightly more than a quarter of the variance in internal stable failure attributions. Further, in data pooled from all three years, students who started the year with an incremental view of talent tended to change to an entity view, whereas those starting with entity view tended to remain stable.

In a two-year longitudinal study of Midwestern United States (rural) students in grades 3 to 5, Fincham, Hokoda, and Sanders (1989) examined the relation between learned helplessness, test anxiety, and academic achievement. Based on student data on test anxiety and helplessness measures in 3rd and 5th grades, as well as on teacher reports of learned helplessness and mastery orientation in both years, these researchers found that both self-report and teacher-report measures of helplessness were stable over the two years. Further, helplessness in 3rd grade significantly predicted academic test scores in 5th grade.

Based on 14- and 15-year olds' self-report measures of failure expectations, active task avoidance, passive task avoidance, lack of self-protecting attribute and bias, Määttä, Stattin, and Nurmi (2002) identified six student clusters (i.e., optimistic, defensive pessimist, slightly functional, slightly dysfunctional, self-handicapping, and learned helplessness). The researchers performed MANOVAs to test for evidence of theorized differences across clusters in well-being and outcome measures (i.e., self-reports of depression, self-esteem, norm-breaking behavior, school adaptation, teacher relations and teacher-reported school achievement). Notably, on the school adjustment variables, the

learned helplessness and self-handicapping groups reported lower levels of teacher relations than any other group. This could be a function of a process in which the student does not respond to teacher interactions, resulting in increased teacher frustration and a concomitant diminution in attention to the student which is then perceived in terms of low teacher-relationship quality. Gender differences emerged as well, with girls in the learned helplessness and self-handicapping groups reporting higher depression than girls in any of the other groups. Overall, the girls' level of depression was higher than that of boys, and their level of self-esteem was lower than that of boys.

Across these studies, learned helplessness is seen as a persistent trait resulting from repeated failure and the perception of non-contingency of behavior on academic outcomes. As noted, learned helplessness appears to be conceptually close to amotivation. Regarding the potential for this construct to inform an understanding of apathy, Brophy (2004) suggests a distinction between learned helplessness and apathetic learners in terms of the value they place on learning. Whereas learned helplessness students typically consider learning important and would like to be academically successful, apathetic learners are simply uninterested and possibly alienated from the learning that takes place in schools.

This interpretation echoes the work of Eccles, Wigfield, and colleagues on expectancy-value theory (e.g., Meece, Wigfield, & Eccles, 1990; Wigfield & Eccles, 2000), according to which motivation to act results from the product of an individual's expectancy for success in an activity and his or her value for that activity and success in it. If either is zero, the product, motivation, also assumes a zero value. Thus low motivation due to learned helplessness would be akin to zero expectancy whereas apathy

may be more closely bound to value. This raises the theoretical issue—taken up in the conclusion—of the relation between apathy and lack of value.

Work Avoidance

Goal orientations, particularly the work avoidant orientation first identified by Nicholls and colleagues (1985), also have potential to inform an understanding of apathy. Extending achievement goal theory, which posits that learners engaged in similar academic tasks may be pursuing dissimilar goals associated with qualitatively different strategy use and persistence, goal orientations categorize individuals' enduring academic goal pursuit tendencies (Dweck & Leggett, 1988). Early research identified two primary goal orientations distinguishing between students seeking mastery of content, labeled a “task,” “mastery,” or “learning” orientation, and students aiming to appear competent, referred to as “ego” or “performance” orientation (Ames & Archer, 1988; Nolen, 1988).

Subsequent investigations suggested that among those with performance goals, some students may be aspiring to appear successful (performance-approach orientation) whereas others may simply attempt to avoid looking unsuccessful or unable (performance-avoid orientation; Elliot & Church, 1997; Elliot & Harackiewicz, 1996; Middleton & Midgley, 1997). The work avoidance orientation was identified to describe students who consistently put forth as little effort as required to get by academically (Meece et al., 1988; Meece & Holt, 1993; Nicholls et al., 1985).

Measures

Multiple measures have been developed to tap a set of goal orientations comprising work avoidance. Meece and colleagues (1988) assessed work avoidance with items such as “I wanted to do as little as possible” and “I wanted to do things as easily as

possible so I wouldn't have to work very hard." Several studies have based work avoidance composite scores on the Nicholls et al. (1985) measure, which tapped work avoidance with three items asking participants when they feel most successful (e.g., "[when] I get out of work;" "[when] work was easy;" or "[when] I score high without studying"). Similarly, work avoidance items on Skaalvik's (1997) measure include "I like school best when there is no hard work" and "At school I like to do as little as possible."

Smith, Duda, Allen, and Hall (2002) made minor modifications to the Nicholls et al. measure for use with university students (e.g., "In my university classes I like to do as little as possible"). Items tapping work avoidance on a personal goals measure used by Cobb et al. (1991) closely parallel those on other measures (e.g., "I feel really pleased in math when I don't have to work hard"). As these sample items illustrate, the operationalization of work avoidance remains quite consistent and thus allows for comparisons across findings.

Related Findings

The present review identified 13 goal-orientation studies focused on work avoidance. Most frequent statistical approaches were either exploratory or confirmatory factor analyses, run on a set of items representing multiple goal orientations, to support the existence of distinct and mostly independent dimensions. Notably, evidence of similar goal-orientation patterns has been found among samples in several countries (e.g., Albaili, 1998; Riconscente & Maggioni, 2004). Cluster analyses have also been performed based on a multivariate goal orientation composite, to allow patterns to emerge from the data rather than restricting participants to one primary orientation (Meece & Holt, 1993; Seifert & O'Keefe, 2001). Beyond investigating the presence of

independent goal orientations in students, many studies explored associations between goal orientation composite scores and other variables germane to the learning process.

Strategy use. Variables related to learning strategies have been investigated in relation to goal orientations. Based on self-report data gathered from a sample of 5th and 6th graders, Nolen (1988) tapped both general and task-specific motivational orientations, and found significant negative correlations between both general and task-level work avoidance and task-specific use of deep processing strategies. General work avoidance was also negatively associated with students' general value of deep processing strategies, whereas task-level work avoidance negatively related both to task-specific valuing of deep processing strategies and to task-specific use of surface-level strategies. In particular, although a task orientation was associated both directly and indirectly with deep-processing strategy use, neither perceived strategy value nor perceived ability strongly predicted deep-processing strategy use.

A related finding was reported by Meece and Miller (2001) in analyses of longitudinal data from elementary school students, whose changes in task-mastery scores explained additional variance in reported active learning strategy ratings and superficial learning scores beyond that associated with achievement level and prior strategy rating assessments. Meece and Holt's (1993) cluster analysis of data from 5th and 6th graders identified three clusters, with highest work-avoidance scores found in the same cluster posting the highest use of effort-minimizing strategies and lowest use of active-learning strategies.

Among older students, Smith et al. (2002) found a significant negative correlation between work avoidance and effort regulation ratings ($r=-.44$) reported by college

students. Similarly, Somuncuoglu and Yildirim (1999) found that the work-avoidant orientation was negatively correlated with deep cognitive and metacognitive strategy use in a sample of Turkish undergraduates. However, in analyses of data from gifted elementary and high school students, Neber and Schommer-Aikins (2002) reported no significant correlations between goal orientations and reported strategy use.

Intrinsic motivation and interest. Multiple studies have found negative relations between work avoidance and intrinsic motivation or interest. Thorkildsen and Nicholls (1998) found that work avoidance associated negatively with interest and effort beliefs and positively with extrinsic elements as sources of success. Mathematics-specific measures of goal orientations found work avoidance strongly and negatively correlated with intrinsic motivation (Skaalvik, 1997). Examining relations between work avoidance and the SDT regulatory styles, Smith et al. (2002) found moderate correlations with dimensions of intrinsic motivation (Vallerand et al., 1992, 1993), as well as with the extrinsic motivation dimensions “identified” and “introjected.” Not surprisingly, work avoidance was significantly and positively correlated with amotivation. A significant though weak correlation was also found between work avoidance and interest by Harackiewicz et al. (1997). In a related finding, Thorkildsen and Nicholls found a strong negative relation between undergraduates’ satisfaction with learning and work avoidance.

Individual differences and beliefs. Harackiewicz et al. (1997) tested a model of personality influence on final grades mediated by goal orientation and found that while work avoidance and performance goals were endorsed by highly competitive students, individuals high on work mastery were less likely to adopt work avoidance goals. Skaalvik (1997), reporting on two regression studies examining associations between

composites from a four-factor goal orientation structure and several self-beliefs (e.g., self-concept, self-esteem, self-efficacy), found work-avoidance related negatively to academic self-concept and positively to anxiety in native language class. Similarly, Smith et al. (2002) found support for a weak but significant positive relation between test anxiety and work avoidance.

Ability. Empirical evidence suggests that individuals high on work avoidance either perform more poorly than their peers or perceive themselves as having low ability. In a longitudinal study by Meece and Miller (2001), elementary school students with below average achievement scores in language arts and reading reported the highest work avoidance and performance goals for classroom literacy activities. Thorkildsen and Nicholls (1998) reported a negative correlation between work avoidance and perceived ability. Similarly, in a sample of college students, Smith et al. (2002) found a significant and moderate negative correlation between work avoidance and perceived ability. Using cluster analysis on data obtained from college students, Seifert and O'Keefe (2001) found that lack of confidence and control, as well as lack of perceived meaning, was associated with work avoidance. However, this study did not include measures of performance or ego orientations, which may have artificially boosted the amount of unique variance explained in this relation.

Longitudinal and intervention trends. Findings regarding variations in work avoidance over time paint a conflicting picture. Although Meece and Miller (1999) found changes in literacy-related work avoidant goals in a longitudinal study of students from 3rd to 5th grade, the direction of change was not consistent across grade levels. In a sample of gifted students from elementary and high school grades, Neber and Schommer-

Aikins (2002) found significantly stronger work avoidance in older students. In a related finding, Cobb et al. (1991) reported no differences between experimental and control groups on work avoidance or task orientations; however, the experimental group reported significantly less ego orientation than did the control group following the intervention. Meece and Miller (1999) tracked student data over a one-year intervention study targeting instructional practices and found that the work avoidance of low achievers in high implementation classrooms declined significantly.

Gender differences. Evidence from a number of studies suggests that boys experience higher levels of work avoidance than do girls. In one cohort of a longitudinal study following students from third to fifth grade, boys reported significantly higher work avoidance than did girls (Meece & Miller, 2001). In cluster analysis of data from middle school students, boys were disproportionately represented (61%) in the cluster with highest work avoidance (Meece & Holt, 1993). On the contrary, Neber and Schommer-Aikins (2002) found science-related ego orientation higher for females than for males but no gender differences for work avoidance or task orientation.

Contextual factors. Some studies suggest that contextual factors play an important role in fostering the adoption of different goal orientations. A statistically significant disproportionate number of cases in the high work avoidance cluster were associated with two particular teachers in one study (Meece & Holt, 1993). Harackiewicz and colleagues (1997) found an instructor interaction effect on level of reported interest following a semester-long college course, although there were no significant differences by instructor with respect to goals or individual differences measures. Further, a multinational study found that while a four-factor structure emerged in independent analyses of data from

college students in France, Italy, Taiwan, and the United States, significant differences were found in between-country average work avoidant ratings, suggesting that cultural context may play an important role in fostering variations in goal orientations (Riconscente & Maggioni, 2004).

Summary

In conclusion, a large body of research on work avoidance consistently operationalizes this construct by self-reports of minimizing effort for academic tasks, lending support to the theory that some students have set the academic goal of getting by with as little effort as possible. This general orientation to academic tasks, manifested in students from elementary school through college, is related to maladaptive beliefs and behaviors such as low perceived ability, minimal use of effective strategies, and low levels of intrinsic motivation. Some findings indicate that contextual factors may exert influence on the goals students tend to adopt, and that boys are more likely to adopt work avoidant goals than are girls.

The distinction between performance-avoidance and work avoidance may be due to different underlying processes, with low perceived ability leading to performance-avoidance and low value for academic tasks giving rise to work avoidance (Seifert & O'Keefe, 2001). However, the interplay of perceived ability and task value makes this a difficult relation to tease apart. The finding that amotivation relates strongly to work avoidance suggests that perceived lack of control and competence may contribute to students' orientation to eschew hard work in academic settings. These results are consistent with SDT hypotheses that controlling teacher-communication styles are important in understanding motivational outcomes in students.

With respect to apathy, students who care about their performance, even if not about the content, are not operating in the absence of emotion or cognition. In a qualitative inductive investigation, Dowson and McInerney (2001) found behavioral, affective, and cognitive dimensions of middle-school students' work avoidant goals. Although the construct operationalization and research findings, taken together, suggest that work avoidant students behaviorally exert little effort, cognitively set non-goals, and appear emotionally removed from the learning process, it is not clear whether they lack value or hold negative value for school work. Salient to clarifying an apathy construct, degree of perceived meaning in academic tasks also appears to foster work avoidance and may relate to apathy for academic tasks (Seifert & O'Keefe, 2001). Finally, although work avoidance emerges as a dimension distinct from mastery in factor analyses, the high correlations between these factors suggests that work avoidance may be the absence of a mastery orientation (Skaalvik, 1997; Thorkildsen & Nicholls, 1998).

Summary of Apathy-Related Constructs

This section reviewed five constructs—amotivation, boredom proneness, disengagement, learned helplessness, and work avoidance—with potential to inform an understanding of apathy. Several salient considerations emerge from the theoretical and empirical work conducted with these constructs. Importantly, research suggests that boredom, amotivation, or disengagement may arise in part from the absence of a key motivation ingredient other than student valuing or feeling for an activity or topic, such as sense of competence or control. That is, individuals may value, and thus not be apathetic, about learning, but may adopt maladaptive orientations such as learned helplessness or work avoidance as consequences of contextual aspects or self-beliefs.

In examining amotivation, it became evident that further research is needed to distinguish between lack of purpose or meaning and lack of value, perceived competence, and contingency of behavior. Further, although amotivation has been found to correlate with learned helplessness and work avoidance orientation, distinctions remain. Whereas learned helplessness is bound to a sense of noncontingency, amotivation may result from lack of intention to act due to lack of purpose. Empirical findings indicate a weak to moderate relation between work avoidance and amotivation, supporting the relative independence of these constructs. Moreover, additional research is necessary to understand how work avoidance emerges in students, particularly given some evidence of increased work avoidance over time.

One key to understanding the relation between these constructs is the fact that amotivation deals with how individuals pursue goals, not the content of the goals themselves. Work-avoidance, in contrast, focuses on the content of goals theorized to exert influence on their pursuit. The role of goal content in energizing and directing human behavior has long been the focus of research and theory (Ford & Nichols, 1987). Wentzel is among those who have investigated the role of goal content both empirically and theoretically. Her work has documented that the pursuit of multiple goals in the classroom contribute positively to students' academic performance (Wentzel, 1993). This study and others underscores the importance of examining goal content as well as the contextual and social variables that may interact in complex ways with students' goals to elicit a range of observable outcomes (e.g., Wentzel, 1989, 1993, 2000; Wentzel, Weinberger, Ford, & Feldman, 1990).

As discussed, boredom involves negative affect rather than lack of affect and

therefore does not appear to be synonymous with apathy. However, long-term boredom may herald impending apathy. Similarly, disengagement has been operationalized in primarily behavioral terms, suggesting that it may be a consequence or symptom, rather than synonym, of apathy.

Evidence from studies addressing a range of apathy-related constructs suggests that contextual factors elicit variations in motivation states and may also play a role in the adoption of persistent orientations or traits. Student relationships with parents and teachers offer promising avenues for potential interactions between individual and contextual variables and motivation.

Issues for Future Research

The present review provides a foundation for investigations that further define and document apathy in educational settings. Five apathy constructs were identified, and from these several issues emerged, including the state-trait distinction and operationalizations spanning behavioral, cognitive, or emotional dimensions. A range of contextual factors, including teacher communication style and school setting, were repeatedly found to relate differentially with apathy constructs. Additionally, the literature reflected substantial (although not unanimous) agreement that apathy is maladaptive and associated with a host of negative consequences for learning and development, as in the case of adolescent apathy, amotivation and work avoidance.

Extending the review to five apathy-related constructs illuminated potential conceptualizations of apathy and its correlates in the academic realm, with emphases again varying along behavioral, cognitive, and emotional lines.

Defining Apathy

Results of the present review suggest that additional research is necessary to confirm whether apathy toward school has been adequately conceptualized as an existing construct or is still at large. In the case of the former, bringing all the contestants simultaneously onto the playing field will afford the possibility to examine the degree of independence of each construct. For both alternatives, methodologies that gather descriptions of apathy from teachers and students will allow for comparison of operationalizations as well as for the emergence of additional conceptualizations.

Toward Greater Parsimony

Specifically, five of the constructs reviewed demonstrated strong potential for denoting apathy, namely adolescent apathy, amotivation, disengagement, apathy syndrome, and work avoidance. Therefore an essential issue to resolve with additional research is the independence and validity of these conceptualizations. Construct independence can be determined via statistical analysis of quantitative data generated by measures of each construct, whereas construct validity should be assessed by tapping theoretically similar and dissimilar variables to establish criterion validity. Moreover, qualitative research unconstrained by *a priori* assumptions is in order to either confirm existing operationalizations or offer additional theoretical definitions of apathy (Dowson & McInerney, 2001).

Among the issues to address in establishing a definition of apathy is its manifestation as state or trait, or, alternatively, in terms of processes. It is conceivable that both expressions are in play, with a trait-like dimension evolving from repeated instantiations of an apathy state. It is also critical to ascertain the incidence of apathy.

That is, notwithstanding the frequent references to apathy noted in the present review, what proportion of individuals can be considered apathetic? Related definitional questions include whether apathy is a general condition or bound to specific domains, tasks, or contexts.

Working with a Folk Term: Lessons from the Case of Alienation

Work with a term that often appears in common parlance poses a particular challenge to researchers, as illustrated by the case of *alienation*. The last few decades witnessed the attempts of sociologists and psychologists to free the term alienation from the many folk definitions which thwarted efforts to assign it a precise meaning and operationalization (Seeman, 1959; Wegner, 1975). Although some abandoned the fight (consider Lee's 1972 article, "An Obituary for 'Alienation'"), others have attempted to resurrect the construct, even applying it to education (Lacourse, Villeneuve, & Claes, 2003; Mau, 1992; Williamson & Cullingford, 1997). Nevertheless, a pervasive lack of semantic clarity has prevented the term alienation from making a substantial contribution, as underscored by Williamson and Cullingford (1997): "Despite (or perhaps due to) its widespread usage across a number of disciplines, there has been a failure to reach a consensus on even its most basic aspects" (p. 263). Given the small number of peer-reviewed articles and lack of clear conceptual definitions used in those studies, alienation was not included as an apathy-related construct in the present review.

The present study stood to gain from the life history of alienation. First, specifying the construct as school-related apathy rather than apathy writ large constrained the problem space and increased the likelihood of crafting a common conceptualization. Second, incorporating teacher and student perspectives and verbiage into the

operationalization of school-related apathy bolstered consistency between folk and research-based definitions. Finally, including concise definitions, both conceptual and operational, when writing about school-related apathy contributed to clarity and a shared understanding of the term.

Additional Theoretical Considerations

Theoretical analysis can inform research designs capable of detecting alternative conceptualizations of apathy. One candidate for a definition of apathy that can be drawn from this review is *absence of value*. Lack of value is comprised in the conceptualization of amotivation forwarded by self-determination theory, and Brophy (2004) identified value as distinguishing learned helplessness from apathy. The role of value in motivation is also highlighted in expectancy-value theory (Wigfield & Eccles, 2000), which casts motivation as the product of the expectation one has for success and the value placed on success in that activity. Both knowledge and value of a specific subject are considered central to the construct of individual interest, with the personal meaning attributed to a particular subject reflected in the stored-value aspect of individual interest (Boekaerts & Boscolo, 2002; Renninger, Ewen, & Lasher, 2002).

In weighing the potential of value (or the lack thereof) to delineate apathy, an additional question arises: *For what* are individuals motivated? Most approaches to motivation in educational settings, including the constructs described herein, reflect an emphasis on learning or achieving (Brophy, 1983; Eccles, Wigfield, & Schiefele, 1998; Stipek, 1996, 2002). In this case, apathy could take the form of lack of value for *learning* or *achievement*. An alternative conceptualization casts learning as a means to *relationship* with specific aspects of an individual's reality (Hunter & Csikszentmihalyi, 2003). This

distinction is particularly salient in school contexts, where the emphasis tends to be on the activity of *learning* rather than on *interest* in a particular object or activity

To experience interest, by definition, implies that one is interested in *something*. Interest does not occur without a referent, whether it might be the attractive person standing across the room from me, or the fascinating book on the bestseller list. This necessarily means that to facilitate experiencing interest I must grapple with my reality in a way that somehow affects it....Interest *requires* action. (p. 33)

In other words, action is integral, but not (necessarily) prior, to interest.

Consistent with this perspective, apathy would entail lack of valuing of some *object or content*, with learning valued not *per se* but rather as the *process* by which a valued object is grasped, or internalized. The first “action” of interest indicated by Hunter and Csikszentmihalyi may thus consist in being moved, allowing one’s awareness to conform to an aspect of reality.

In this vein, Wolters (2003) posed the distinction between motivational products (i.e., a state of being interested or having a goal) and processes (i.e., the means by which the motivation product is instantiated). Similarly, Corno (1993, 2004) individuates motivation and volition, with motivational processes leading to goals, needs, or desires, and volition describing the implementation of intention. Moreover, self-determination theorists as well as goal theorists differentiate the *content* of goals from *how* they are pursued (Deci & Ryan, 2000; Dweck & Leggett, 1988; Martin & Ford, 1987; Wentzel, 2000).

Further reflection on the process-product heuristic suggests another formulation of apathy as catalyst, situated at the pre-motivation stage and involved in triggering processes by which individuals choose or establish goals and subsequently assume regulatory or goal pursuit styles. Examination of the etymology of apathy proves useful here, as the prefix “a” indicates “without” and the root “pathy,” from *pathos*, denotes “feeling,” “suffering,” or “experiencing”. Similarly, the etymology of “affect” harkens back to *affectus*, meaning “touched or influenced by.” Implicit in this approach is an assumption that being moved is indicative of psychologically healthy adaptation. As Furtak (2003) notes, “The attainment of complete apathy is fundamentally at odds with our distinctively human tendency to form attachments to the world: such involvement with mundane reality disposes us toward *pathos*, that is, toward being moved or affected” (p. 123). Apathy may thus be conceptualized as absence of being moved, which would locate the construct in the emotional dimension.

Another, related, possibility is that apathy constitutes a *refusal* or *resistance* to be influenced or touched by external events. Since this conceptualization involves a decision, it would therefore draw on cognitive as well as emotional aspects of experience. That is, rather than merely a blunting of emotional responses, apathy may be the suppression of the evaluative acceptance of being moved that people, events and objects elicit in individuals (Giussani, 2000, 2001). Curiously, this definition potentially responds to calls in both the psychological research and philosophical literatures to link the cognitive and affective dimensions of experience (Arendt, 1981; Zembylas, 2005). Spanish philosopher Maria Zambrano used *razón poética* [poetic reason] to describe affective consciousness (Johnson, 1996; Perez, 1999). Similarly, Stein (1969) wrote that

“feeling, understood as mood, and perceiving, in which the model is seeing, are co-primordial in conceiving of man’s relation to the world... if one did not see or perceive, the world would not appear, and, if one did not feel at least alive, he himself would not appear as the subject of experience” (p. 748). Giussani (1997) engages a compelling metaphor to describe the integrated roles of cognition and emotion in the knowledge construction process.

Let us imagine for a moment that we are on vacation in a valley high in the Alps. ...It is a splendid day. I take out a pair of binoculars and try to look around, but I cannot see a thing. Everything is dark and opaque. Then I focus the lens and am presented with an exceptional panorama, so clear that I can even make out some people skiing on the highest mountain around. The lenses of the binoculars are not made to block my view or make it more difficult to see, but to make it easier. So how do they do this? By, so to speak, carrying the mountain closer to the pupil of my eye, so that the “seeing energy” of my eye, if you will, grasps it more easily. ...it is as if the lens brought the objects closer so that the visual energy of my eye can “seize” them.

This can serve as an analogy for the problem that concerns us here. Let us imagine *f*, or feeling, as a kind of lens; the object is carried closer to a person’s cognitive energy by this lens so that reason can know it more easily and securely. The *f* is, therefore, an important condition for knowledge. Feeling is an essential factor for seeing—not in the sense that it itself sees, but in the sense that it represents the condition by which the eye, or our reason, sees in accordance with its nature. (p. 28)

Within this framework, apathy as a decision not to be moved would constitute a derailing of reason by disconnecting affect and cognition, thus impeding the individual's ongoing relationship with reality, with maladaptive consequences for motivation products and processes. That is, by refusing to be moved by an object or issue, an individual's level of awareness remains fixed, closed to incorporating knowledge of that object. In contrast, learning something new requires allowing one's awareness, or knowledge-base, to be affected by the newly encountered aspect of reality (Giussani, 2000).

Individual and Group Differences in Apathy

The present review identified a number of individual differences shown to associate with apathy and apathy-related constructs. These include well-being, distress, academic achievement, classroom context, quality of teacher-student relationship, and instructional style. Thus research that brings clarity to the definition of apathy should also seek to assess its relation to a number of individual difference variables. Clearly, an important variable tied to school-related motivation is academic achievement. Gender also represents an important correlate, in terms of incidence and form of expression. In addition, aspects of psychological health related to school and to conceptualizations of apathy represent worthy correlates to examine. Such variables include curiosity and interest, boredom proneness, contentment, life satisfaction, and purpose in life.

In the present study, individual differences in boredom proneness, curiosity, distress, and well-being were examined in relation to the five school-related apathy constructs retained for analysis. These variables were selected based on prior research documenting their associations to school-related outcomes. Moreover, inclusion of these indicators was grounded in a theoretical rationale, shared by several of the studies

presented herein, that important outcomes of formal education entail much more than academic achievement as tapped by GPA or standardized testing. Rather, the development of positive attitudes toward both learning and the content of schooling constitute essential elements of a quality education.

Research on curiosity and learning dates back several decades. Berlyne (1954) was among the first to scientifically study curiosity in humans. Day (1968) found that students' specific curiosity was weakly related to academic achievement of students in grades 7 to 9. Dimensions of curiosity (e.g., manipulatory, conceptual) have been associated with first graders' probability-learning strategies (Kreitler, Zigler, & Kreitler, 1984). More recently, curiosity has been studied in relation to interpersonal closeness (Kashdan & Roberts, 2004), the pleasure of learning (Litman, 2005), and job performance (Reio & Wiswell, 2000).

Distress has been associated with a range of characteristics with relevance to students' school experiences. Erikson and Steiner (2003) found that higher levels of distress were related to lower overall adjustment in a sample of non-clinical high school students. A study of undergraduates' narrative memory found that memory content and affect predicted perceived distress (Blagov & Singer, 2005). Those reporting higher distress also tended to remember events consistent with their negative mood. Wentzel and colleagues (Wentzel, Weinberger, Ford, & Feldman, 1990) found that distress contributes negatively to academic achievement via intrapersonal processes. They also traced the relation of distress to academic achievement through behavioral manifestations of student efforts to achieve. Weinberger (1998) found that the interaction of high distress and levels of restraint is associated with negative personality traits and attachment style,

DSM-IV disorders, and neurotic or immature primary defenses. Distress has also been shown to relate to participation levels in research, with high distress relating to lower participation rates and lower family interview consent (Weinberger, Tublin, Ford, & Feldman, 1990).

Studies have also related student well-being to school experiences. Obradovic and colleagues (Obradovic, Dulmen, Yates, Carlson, & Egeland, 2007) called for research on well-being as a dimension of competence. Valkenburg, Peter and Schouten (2006) targeted adolescents' well-being in a study of friend networking Internet sites. In a study of perfectionism in 9th graders, Stoeber and Rambow (2007) found that well-being was negatively related to students' negative reactions to imperfections and suggested that excessive self-criticism may contribute to lower well-being in students.

Developmental Differences in Apathy

Future research should also identify developmental differences in apathy with respect to its level of incidence, expression, and correlates. Prior research evidences marked declines in student motivation across the transition from elementary to middle school (Wigfield, 1994). However, little research has examined differences between middle- and high-school students' motivation (Isakson & Jarvis, 1999; Murdock, Anderman, & Hodge, 2000). Moreover, much research has been conducted with college students, with relatively small amounts of data drawn from high school populations. Several characteristics—such as structure, social and academic norms, and school size—set high schools apart from middle schools, and may be associated with changes in student motivation levels (Tomback, 2006). Thus a focus on high school students and

differences between high school and middle school levels of motivation both represent important directions for future research.

The literature suggests declines in GPA and attendance following the transition to high school (e.g., Gillock & Reyes, 1996; Isakson & Jarvis, 1999). Alterations in students' perceptions of self and of the school environment following this changeover have also been reported. Barber and Olsen (2004) conducted a 5-year longitudinal study that spanned students' transition into high school. They found that, compared to their last year of middle school, freshman high-school students reported that they liked school less, perceived less teacher monitoring and reduced support from teachers and administrators, and experienced lower levels of classroom autonomy. Students in their study also reported less school-activity involvement, lower self-esteem, and higher depression.

Similarly, Gillock and Reyes (1996) reported lower student evaluations of teacher instruction following this transition. Newman, Lohman, Newman, Meyers and Smith (2000) reported that students perceived their high school teachers as less supportive and as setting high standards and demands compared to their eighth grade teachers. However, a longitudinal study by Murdock and colleagues (2000) yielded differing results, with freshman high school students reporting more positive evaluations of their 9th grade teachers' communication of expectations and values over those of 7th grade teachers. The ninth graders in their study reported feeling more respected and cared for by teachers than they did in middle school.

Given findings that students' perceptions of teacher support are positively associated with students' perceptions of school meaningfulness and negatively related to students' problem behaviors (e.g., Brewster & Bowen, 2004), the repeated reports of

declines in student perceptions of teacher support are cause for concern. For instance, Roeser, Eccles, and Sameroff (1998) reported positive and supportive teacher-student relations were found to increase students' academic values.

There is also evidence to suggest that the relationships between variables undergo transformations in the passage from middle to high school. Gillock and Reyes (1996) reported significant changes in the association between teacher authority and GPA and between students' perceived teacher relationship and sense of scholastic competence. Further, the literature on self-concept and other individual variables documents that differentiation increases with age (e.g., Harter, 1998; Marsh, Craven, & Debus, 1998). On the basis of this research, it is possible that apathy does not emerge as a distinct characteristic until older ages, and that domain- or task-specific manifestations become evident at older ages.

In sum, the extant research suggests that students' school-related apathy will be more pronounced in the older grades, and that contextual factors, particularly those related to the teacher, may be related to this change. One task for future research is to distinguish developmental changes that operate independently of the school experience, and those changes in students that are influenced by aspects of school. For instance, findings in grade-level differences may be due to maturity rather than contextual difference, as Newman et al. (2000) have suggested. As greater clarity is gained from research into the meaning of apathy both conceptually and operationally, it will become possible to examine more carefully the nature of differences that emerge between grade levels, and particularly across institutional transition points.

Conclusion

While the issues raised by the present review were too numerous to be explored in the present study, several questions were addressed that resolve some issues and establish a firm basis for additional research. Specifically, the present study clarified the theoretical and operational definition of school-related apathy in adolescents via a multi-method approach that compared existing apathy and apathy-related constructs using both quantitative and qualitative data to establish construct independence and validity and to identify perspectives not represented in the extant literature. Individual differences on select variables based on prior research and theoretical considerations afforded analysis of apathy correlates and potential influence on important educational outcomes. Finally, by recruiting participants from two grades on either side of the middle- to high-school transition, the present study captured a snapshot of apathy at different developmental states that can inform both future research and educational practice.

CHAPTER III

METHODOLOGY

Participants

Student participants were 165 8th graders (59.9% female) and 141 10th graders (58.0% female) enrolled in 16 middle schools and 2 high schools in a geographically intact segment of a Roman Catholic school district in the northeastern United States. The target sample size of 160 students per grade level was based on power analysis for detecting a medium effect size for the statistical methods for means comparisons employed in this study (Cohen, 1992). Twenty-three 8th-grade teachers and 15 10th-grade teachers participated in interviews. Data were collected from October to early December of 2006. It was expected that this timing would yield survey and interview data reflective of the school year as a whole.

Students

Assent forms and parental consent forms for all students willing to participate were distributed and collected prior to any data collection. The student forms indicated two options for participating: survey only or survey and interview. A total of 516 students received the consent and assent form packets. Of those students, 306 (59.3%) returned the forms indicating both student and parental permission to participate in the study. Males represented 41.0%, and females 59.0%, of participants. Seven participating students were absent on the day of data collection, resulting in 299 full participants, of whom 213 (71.2%) had obtained parental permission, and were also personally willing, to be audiotaped if selected for an interview. The average age of 8th-grade student participants

was 13 years and 2.9 months; 10th graders were 15 years and 2.2 months old on average. European American ethnicity was reported by 86.1% of student participants.

Since the sample for the present study was drawn from students attending Catholic schools, it was judged necessary to consider religion and levels of religious practice to inform the generalizability of results. The majority (89.5%) of participating students reported being Catholic. This percentage was higher for 8th-grade students than for 10th-grade students, potentially reflective of older students' (and their parents') decisions to attend Catholic school for academic rather than faith motives. Less than two-thirds (64.8%) of participating students reported practicing their religion regularly. Grade-level differences were observed for practice of religion, with just over half (55.5%) of 10th-grade students and 72.7% of 8th-grade students reporting regular observance of their religion. All student demographics data are displayed in Table 4.

Student participation rates were compared to school district data for gender, ethnicity and religion to ascertain whether these variables related to willingness to participate in the study. In participating schools overall, females (52.8%) outnumbered males (47.2%). A comparison to study data suggests that females may have been more likely to participate than were males. Although large differences were not present with respect to ethnic representation, a higher percentage of minority students participated in the study than the percentage of minority students reported in official school district data. This may be due to students' reporting an ethnicity other than that maintained in official records and thus may not be a valid indication that participants' ethnicity differed from that of students at participating schools overall.

Year 1999 and 2000 United States Census data were also consulted for the small cities and towns from which participants were drawn. These data indicate that the majority of participating schools were located in small cities with populations less than 100,000 in which Caucasians made up between 75 and 90 percent of population. The median per capita annual income for these locales was approximately \$16,000, roughly two-thirds that of the county and state. Between 25% and 29% of individuals less than 18 years old in these cities lived below the poverty line. Over one-third of the population in these cities speak a language other than English at home, and 58% of adults over age 25 have completed high school.

Teachers

Teachers of 8th and 10th-grade students at participating schools were recruited to be interviewed about student motivation. As an incentive to participate, teachers were informed that they could receive in-service credit for participating in a workshop at the conclusion of the study in which results would be shared and discussed. Since students in participating middle and high schools attended classes taught by different teachers, and since the present study investigated school-related apathy rather than domain-specific apathy, no attempt was made to match specific teachers with specific students. Consent forms were secured from all teachers willing to have their audiotaped and transcribed responses about student motivation included in the analysis. At one of the two participating high schools, the principal personally recruited teachers ($n=9$) to participate, presumably selecting those believed to be good teachers. Teacher interview data from the two high schools were examined for differences that might have resulted from this selection bias. Since the results of this comparison did not suggest systematic between-

school differences, analyses were carried out as planned. At all other schools, participation was open to all teachers who were responsible in some way for instruction of the relevant grade level.

Of the 38 participating teachers, roughly one-third (28.9%) were male and two-thirds (71.1%) were female. The majority of teachers (91.9%) reported European American ethnicity, with more minority representation present at the 10th- than at the 8th-grade level. Average age of teachers was 40 years and 5 months. Grade 8 teachers had taught 8th grade for an average of 6.2 years ($SD= 8.8$); 10th-grade teachers had taught 10th grade for 6.8 years ($SD = 6.8$) on average. Sixty-one percent of 8th grade teachers were in their 5th year or less of teaching at the time of data collection; the same was true for exactly half of participating 10th-grade teachers. Tables 5 and 6 present teacher demographic and teaching experience data. As can be seen by comparing these data with those presented in Table 4, demographics patterns were similar for students and teachers. All consent and assent forms are included in Appendix M.

Measures

Most of the measures administered in the present study were drawn from prior research on the constructs described in Chapter II. For these measures, brief descriptions follow, along with sample items and reliability data obtained in the present study. For each measure, reliability scores for grade 8 and grade 10 are indicated respectively in parentheses following the reliability score for the full sample. Fuller explanations are provided for measures not already reviewed in the previous chapter. All measures were labeled simply with a form reference letter (e.g., Form A) so that participants' responses would not be influenced by form titles. Packets of surveys administered to students were

Table 4

Student Descriptive Statistics for Categorical Data

Variable	Category	All Participants		Grade 8 Participants		Grade 10 Participants		School Data
		Freq.	%	Freq.	%	Freq.	%	%
Gender (n=300)	Male	123	41.0	65	40.1	58	42.0	47.2
	Female	177	59.0	97	59.9	80	58.0	52.8
Grade (n=306)	8 th	165	53.9	–	–	–	–	–
	10 th	141	46.1	–	–	–	–	–
Birth Year (n=293)	1990	25	8.5	0	0	25	18.5	–
	1991	112	38.2	2	1.3	110	81.5	–
	1992	34	11.6	34	21.5	0	0	–
	1993	122	41.6	122	77.2	0	0	–
Ethnicity (n=294)	African American	9	3.1	6	3.8	3	2.2	1.6
	Native American	6	2.0	1	0.6	5	3.7	0.1
	Asian/Pacific Islander American	6	2.0	4	2.5	2	1.5	1.4
	European American	253	86.1	137	85.6	116	86.6	95.4
	Hispanic American	13	4.4	9	5.6	4	3.0	1.5
	Other	7	2.2	3	1.9	5	2.8	0
Religion (n=296)	Catholic	264	89.5	147	92.5	117	86.0	90.8
	Protestant	4	1.4	2	1.3	2	1.5	Other: 9.2
	Other	27	9.2	10	6.3	17	12.5	
Practice Religion (n=298)	Often	193	64.8	117	72.7	76	55.5	–
	Sometimes	50	16.8	16	9.9	34	24.8	–
	Occasionally	36	12.1	24	14.9	12	8.8	–
	Rarely/Never	19	6.4	4	2.5	15	10.9	–

Table 5

Teacher Descriptive Statistics for Categorical Data

Variable	Category	All Teachers		Grade 8 Teachers		Grade 10 Teachers	
		Freq.	%	Freq.	%	Freq.	%
Gender (n=300)	Male	11	28.9	5	21.7	6	40.0
	Female	27	71.1	18	78.3	9	60.0
Grade (n=306)	8 th	23	60.5	–	–	–	–
	10 th	15	39.5	–	–	–	–
Ethnicity (n=294)	African American	1	2.7	1	4.5	0	0
	Native American	0	0	0	0	0	0
	Asian/Pacific Islander American	0	0	0	0	0	0
	European American	34	91.9	4	95.5	13	86.7
	Hispanic American	1	2.7	0	0	1	6.7
	Other	1	2.7	0	0	1	6.7
Religion (n=296)	Catholic	32	94.1	20	95.2	12	92.3
	Protestant	1	2.9	1	4.8	0	0
	Other	1	2.9	0	0	1	7.7
Practice Religion (n=298)	Often	28	82.4	19	90.5	9	69.2
	Sometimes	3	8.8	0	0	2	15.4
	Occasionally	1	2.9	1	4.8	1	7.7
	Rarely/Never	2	5.9	1	4.8	1	7.7

Table 6

Teacher Descriptive Statistics

Variable	All			Grade 8			Grade 10			Grade 8, 10 Means Comparison
	n	M	SD	n	M	SD	n	M	SD	<i>t</i>
Age (years)	38	40.42	13.97	23	42.30	14.52	15	37.53	13.04	1.03
Total Years Teaching	37	11.00	12.59	23	11.43	14.06	14	10.29	10.15	.27
Years Teaching by Grade										
PreK-5	37	3.27	6.69	23	4.78	8.03	14	0.79	2.08	
Grade 6	37	4.38	8.66	23	6.43	10.45	14	1.00	1.84	
Grade 7	37	3.70	6.94	23	5.26	8.33	14	1.14	2.14	
Grade 8	37	4.32	7.44	23	6.22	8.83	14	1.21	2.12	
Grade 9	37	2.03	3.87	23	1.09	3.32	14	3.57	4.33	
Grade 10	37	3.30	5.70	23	1.17	3.63	14	6.79	6.82	
Grade 11	37	2.24	4.04	23	1.17	3.63	14	4.00	4.19	
Grade 12	37	2.43	4.14	23	1.17	3.63	14	4.50	4.22	
Post-Secondary	37	0.66	3.47	23	0.93	4.38	14	0.21	0.80	

assembled such that each measure remained distinct (i.e., each existing measure started on a new page) and the order of measures was shuffled to minimize order effects.

Composites were calculated based on responses to multiple items. When participants failed to respond to all items on a given measure, a missing value was assigned for the corresponding composite.

Demographics

The present study gathered self-reported data regarding student participants' age, grade, race, gender, religious affiliation, and level of observance of religious affiliation by means of a demographics instrument. Teacher participants were administered a demographics instrument to gather self-reported data on years teaching, grade(s) taught, race, gender, religious affiliation, and level of observance of religious affiliation (see Appendix A).

Adolescent Apathy

Adolescent apathy was measured with a short form of Handelman's (1999) Adolescent Apathy Inventory (AAI) created for the present study by the researcher. The adapted AAI retained the first two sections and only comprised items that loaded above .300 on a single factor in Handelman's study (see Appendix B). Items from the original AAI asking students sensitive questions regarding illegal activity were dropped for the present study in order to increase score reliability. On the adapted AAI used in the present study, the first section consisted of 17 statements pertaining to self-concept (e.g., "I am a disruptive person;" "I am an ambitious person"), goals (e.g., "I know what I would like to be when I am an adult") and interests (e.g., "I like to argue/debate about the

topics which are important to me;” “I like reading”) which participants rated on a 5-point scale ranging from “strongly disagree” to “strongly agree.”

The second section consisted of a list of 10 activities (e.g., “went to the movies;” “performed some sort of volunteer/charitable service”). Participants indicated whether they had taken part in each activity sometime in the last two months. For this section, the original AAI used a simple checklist, however to better distinguish “no” responses from missing responses, the form adapted for the present study asked participants to circle either “yes” or “no” for each item.

In light of concerns raised in Chapter 2 regarding the factor structure of the AAI , only AAI total scores for students were used in the present study. First, all items requiring reverse-coding were recoded. For section 2, a single score weighted as one item was created by dividing the number of all “yes” responses by 5. The AAI composite was obtained by summing scores on sections 1 and 2 and taking the average. In order to facilitate interpretation, scores were reflected so that a high score indicated high adolescent apathy. Cronbach’s α for this measure was 0.66 (Grade 8: 0.66, Grade 10: 0.65).

Apathy Syndrome

Apathy syndrome was assessed with Marin’s 18-item Apathy Evaluation Scale (AES) shown in Appendix C. Participants rated items on a 4-point scale ranging from “not at all true” to “very true.” Sample items included, “I put little effort into anything”[reverse-coded] and “I am interested in having new experiences.” Scores for the AES were obtained by summing all item scores, after reverse-coding indicated items. A high AES score indicated low evidence of apathy syndrome. For a sample of 55- to 85-

year-olds, internal consistency as calculated by Cronbach's α was 0.86, and test-retest reliability was 0.76 (Marin, Biedrzycki, & Firinciogullari, 1991). In order to facilitate interpretation, scores were reflected so that a high score indicated high apathy syndrome. Cronbach's α for this measure in the present study was 0.72 (Grade 8: 0.69, Grade 10: 0.75).

Amotivation

To assess amotivation, the 4-item subscale of the Academic Motivation Scale (AMS; Vallerand, Pelletier, Blais, Brière, Senécal, & Vallières, 1992; $\alpha = .85$) was administered (see Appendix D). Participants rated items pertaining to whether or not they have reasons for going to school using a 5-point scale ranging from "strongly disagree" to "strongly agree" (e.g., "Honestly, I don't know; I really feel that I am wasting my time in school"). Amotivation scores were obtained by summing respondents' scores on all items and dividing by the number of items. Cronbach's α for this measure was 0.85 (Grade 8: 0.84, Grade 10: 0.86).

Work Avoidance

Participants' work avoidance was operationalized by the fourth subscale from a goal orientations measure used in several studies and shown to have acceptable reliability in undergraduate students from four countries (Cronbach's $\alpha = .75$; Riconscente & Maggioni, 2004). The 5-item subscale asked students to rate their level of agreement ranging from strongly disagree (1) to strongly agree (5) for items such as, "At school, I want to get others to do the work for me" (see Appendix E). Participants' work avoidance scores were calculated by first reverse-coding appropriate items, summing responses

across all items, and dividing by the number of items. In the present study, Cronbach's α for this measure was 0.84 (Grade 8: 0.83, Grade 10: 0.84).

Boredom Proneness

Farmer and Sundberg's (1992) Boredom Proneness Scale (BPS) was used to assess participants' level of boredom proneness (see Appendix F). This 28-item scale asked respondents to indicate whether each statement was generally true or false for them. Sample items included "I am good at waiting patiently" [reverse-coded] and "Much of the time I just sit around doing nothing." The BPS has been used with a gender-balanced sample of college students and yielded acceptable reliabilities (KR-20: $\alpha = 0.79$; test-retest: $r = 0.83$). Scoring was conducted by reverse-coding appropriate items, summing each participant's responses across all items, and dividing by the number of items. Cronbach's α for the measure in the present study was 0.78 (Grade 8: 0.74, Grade 10: 0.80).

Disengagement

A short 7-item set of questions to tap disengagement was created for the present study based on Pellerin (2005a, 2005b). Items address frequency of truant behaviors and unpreparedness such as missing a day of school for reasons other than illness and going to class without having done the homework (see Appendix G). Participants rate each item on a 4-point scale based on their activities during the prior month. Total disengagement scores for each participant are calculated by summing all items with the exclusion of item 6, which is included in the measure to help obtain more valid data regarding number of school days missed for a reason other than illness. Cronbach's α for this measure was 0.51 (Grade 8: 0.52, Grade 10: 0.53). In light of the low reliability obtained on this

measure, scores were interpreted with caution. In addition, data generated by individual items were examined for insights germane to the purposes of the study.

Distress and Well-Being

The Weinberger Adjustment Inventory (WAI) shown in Appendix H includes a 12-item distress scale composed of 4 subscales: well-being (reversed), self-esteem (reversed), depression, and anxiety. The scale has been validated, yields high reliability, and can be used with middle-school and high-school students without modification to items (Weinberger, 1997). For the purposes of the present study, the WAI distress scale served two aims. First, the well-being and self-esteem subscales could be correlated with apathy measures and were expected to yield moderate to high negative correlation coefficients. Second, taken together, the four subscales form a composite for distress which was expected to correlate moderately and positively with apathy scores variously conceived. Both values thus offered the opportunity to assess the convergent validity of apathy measures. Cronbach's α for this measure was 0.79 (Grade 8: 0.78, Grade 10: 0.79).

Curiosity

To assess curiosity, Kashdan, Rose, and Fincham's (2004) 7-item Likert-scale measure was used on which participants indicated their level of agreement, ranging from "strongly disagree" to "strongly agree," with statements describing themselves (e.g., "When I am participating in an activity, I tend to get so involved that I lose track of time"). In four samples of undergraduates, reliability ranged from $\alpha = 0.75$ to 0.80 (Kashdan et al., 2004). This measure is included in Appendix I. Cronbach's α for this measure was 0.67 (Grade 8: 0.67, Grade 10: 0.67).

Teacher Checklist for Student Apathy Levels

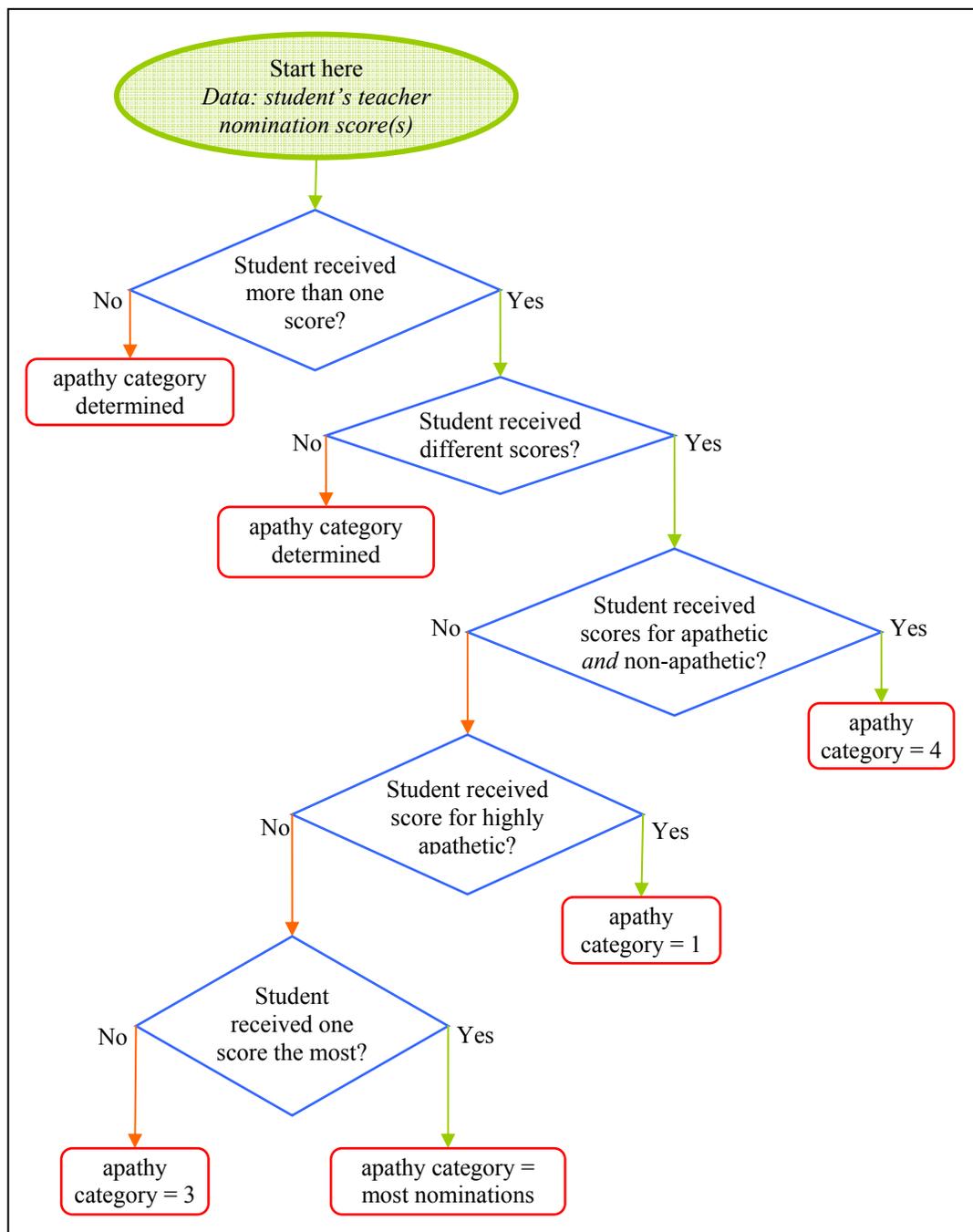
The present study used teacher nominations of students' apathy levels to examine the overlap between research-based and teacher definitions of school-related apathy. Customized lists of either 8th-or 10th-grade students taught by each participating teacher were compiled. Participating teachers were asked to place each student into one of three categories: definitely apathetic toward school; definitely not apathetic toward school; or in the middle. Teacher nominations were gathered as a way to capture folk conceptualizations of school-related apathy. Hence, to avoid influencing the meanings teachers assigned to the term "apathetic", no further instructions were provided regarding category definitions. All participating students were categorized by at least one teacher and by as many as nine teachers. This was due to the participation of varying numbers of teachers at each school. Limitations of this decision are addressed in Chapter 6.

Two variables were calculated based on teacher nomination data. Scores on the dichotomous variable, Apathetic Nomination, were assigned to each student according to whether any teacher had nominated him or her as apathetic. All students receiving at least one nomination as "highly apathetic" were assigned to one group; students who received no "highly apathetic" nominations composed the second group. These groups were labeled " ≥ 1 " and "0," respectively.

A second, polytomous, variable, Apathy Category, was created from teacher nomination data based on a set of decision rules designed to yield four groups of students. Three of these four groups reflected the categories teachers used in the nomination process (i.e., apathetic, middle, non-apathetic). A fourth category was created to denote students who had received both apathetic and non-apathetic nominations. Figure 9

Figure 9

Decision Tree for Assigning Student Participants to Levels of Apathy Category Variable



Note. Rules for assigning each student to an apathy category (1, 2, 3, or 4) based on nomination scores given by the student's teacher(s).

displays the decision rules by which students were assigned to levels of the “apathy category” variable. (See Appendix J).

Academic Achievement

Academic achievement was operationalized by grade-point averages from the preceding academic year. Middle-school participants’ grade-point averages were calculated by averaging grades for English, mathematics, science, and social studies based on data from school records. High-school participants’ grade-point averages were obtained from school records.

Student Interview Protocol

In order to obtain thick descriptions of apathy from the perspective of students, 58 individual interviews were conducted. Random stratified sampling was employed to ensure that interviewees represented a range of teacher-perceived school-related apathy levels. Interviewees were drawn from each cell of a 2 x 3 sampling frame based on grade level (8th or 10th) and apathy level as determined by teacher nominations. The research design specified that ten interviewees be drawn per cell. However since there were not ten students per grade in the midrange apathy category who had also agreed to be interviewed, additional students were drawn from the other apathy categories who had also received at least one nomination in the midrange group. In order to privilege the voices of those more likely to appear in the high- or low- apathy categories, gender was not included as a selection variable.

The semi-structured interview consisted of 6 questions and allowed for probing of responses (see Appendix K). Interviews were audiotaped and transcribed. Interview transcripts were examined for data related to the conceptualization and operationalization

of school-related apathy, individual and group differences in school-related apathy, and prevalence of school-related apathy. The process for analyzing these data is further detailed in Chapter 5.

Teacher Interview Protocol

In order to capture rich conceptualizations of apathy from the perspective of teachers, interviews were conducted with participants across 8th- and 10th-grade teachers drawn from the same schools as student participants. The semi-structured interview consisted of 6 questions and allowed for probing of responses (see Appendix L). Interviews were audiotaped and transcribed. Interview transcripts were examined for data pertaining to the conceptualization and operationalization of apathy, the prevalence of apathy, and individual and group differences in apathy. The process for analyzing these data is further detailed in Chapter 5.

Procedures

The present study used a mixed-methods approach to data collection and analysis, as represented graphically in Figure 10. Parental consent and student informed assent forms were distributed in October and November of 2006. In most schools, the researcher administered the surveys during a class with the teacher present. Only students with permission filled out the surveys. At two schools where only a few students participated, the students were called out of class to fill out the survey in the presence of the researcher in the school library or office. All participating students completed the packet of surveys in one sitting. The presence of the researcher at all survey administrations ensured consistency of instructions to students. Students were also encouraged to ask questions about words they did not know, and told not to complete items they did not understand.

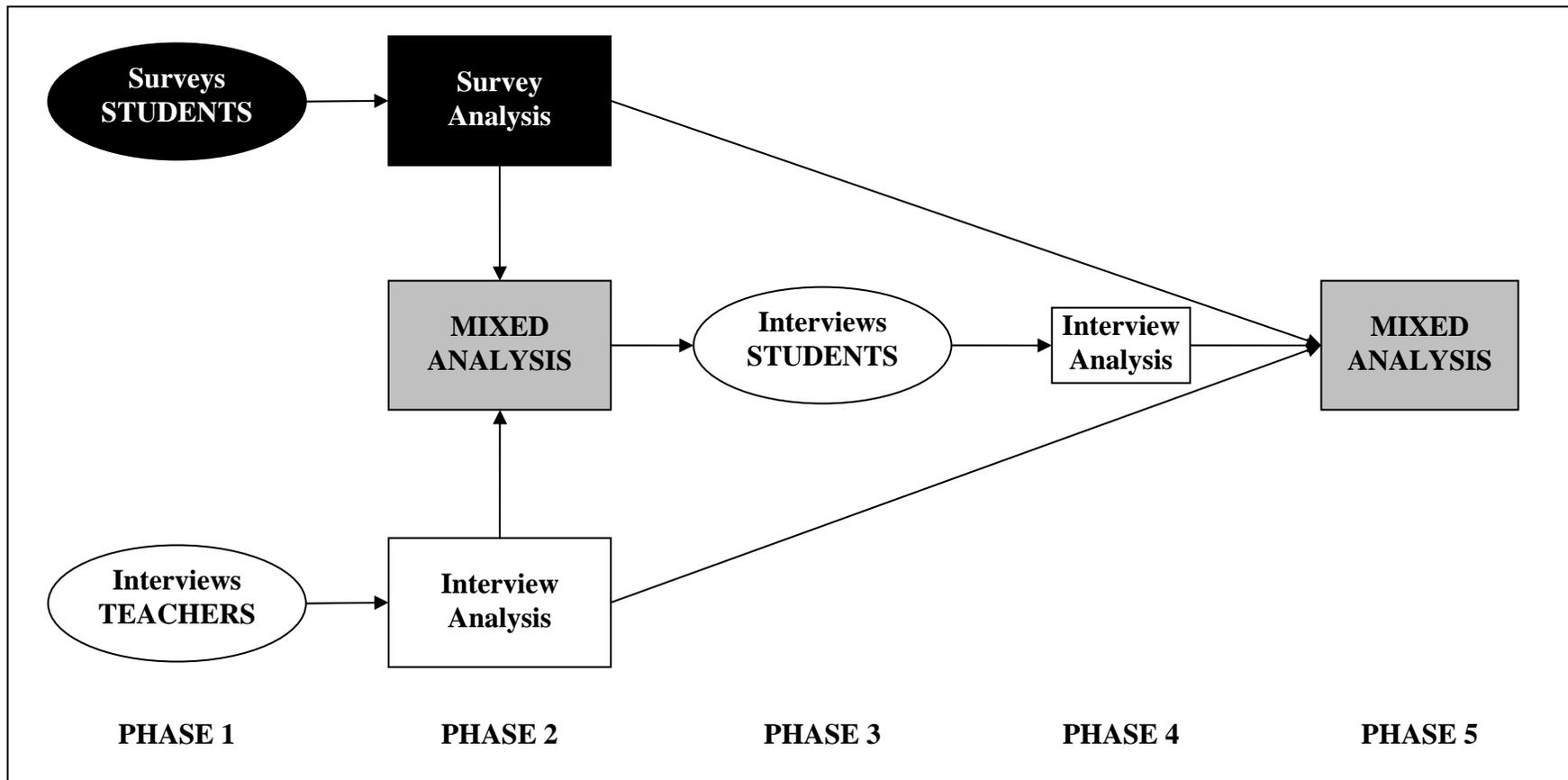
The entire survey administration process took between 25 and 35 minutes. Student GPA data were obtained by the researcher from official school records.

Teacher sessions were conducted within three weeks of the survey administration. Following completion of a demographics sheet, participating teachers were individually interviewed. They then completed the customized student apathy-level checklist. All interviews were audiotaped and transcribed.

Student interviews were conducted approximately six weeks after survey administration. Both the researcher and the interviewee were blind to apathy category and apathetic nomination status of the interviewee. The timing of student interviews was selected so that participants' memories of survey items would not influence their responses to interview questions. Based on teacher interview data, minor modifications were made to the student interview protocol to enable confirmation of emerging patterns with respect to school-related apathy descriptions, conceptualizations, and correlates. Specifically, questions were added to probe for students' motivations for earning high grades and for the subject matter.

Figure 10

Phases of Data Collection and Analysis



Note. Oval: Data Collection/Stream; Rectangle: Data Analysis. Shading: **Quantitative**; **Qualitative**; **Mixed**.

CHAPTER IV

QUANTITATIVE RESULTS

The purpose of the present study was to explore research-based and folk perspectives of school-related apathy in 8th- and 10th- grade students. Both quantitative and qualitative data were generated to compare and critique conceptual and operational definitions, to ascertain whether evidence supports the claim that school-related apathy is a serious problem, to examine relations of school-related apathy to relevant individual and group differences, and to establish whether grade-level differences are present in any of these areas. Results pertaining to quantitative data are reported here in four sections. Data preparation and descriptive statistics are presented first. The remaining sections in turn address the three research questions. Qualitative results are presented in Chapter 5, and in Chapter 6 results from the quantitative and qualitative analyses are integrated and interpreted.

Data Preparation

To prepare the quantitative data for analyses, several steps were taken. First, data were reviewed for evidence of non-random patterns among missing data. This process identified six items on the Boredom Proneness (BPS) measure for which more than 5% of cases had missing values. Review of the measure suggested that this was due to students' lack of knowledge of several vocabulary words, (e.g., seldom, monotonous, passive, and initiative), an inference supported by the fact that during survey administration, many participants asked questions about the meanings of these words. Consequently, these items were dropped from analysis to improve validity of scores. One item on the Apathy Syndrome (AES) measure as well as one item on the Adolescent Apathy (AAI) measure

evidenced the same problem. For both composite scores, dependent-sample t-tests indicated no significant difference between means computed with and without that item; each pair of composites computed with and without the problematic item were nearly perfectly correlated, $r = .99$. However, correlations with other composite scores varied slightly, suggesting non-randomness of missing values. Therefore, the problematic item on each measure was dropped from further analysis. In addition, since middle schools used percentages for final grades, and high schools used a typical GPA score, GPA scores were standardized within grade to create equal scales for between-grade comparisons.

Tests of normality were conducted on all interval-scale variables using the Shapiro-Wilk's W statistic. Only adolescent apathy and curiosity scores were normally distributed, with skew and/or kurtosis present in the remaining variables. Each composite was also examined for outliers, however no extreme values were evident for any of the composite scores. The central limit theorem demonstrates that even for data that are not normally distributed, the sampling distribution of the mean for sample sizes greater than 30 will nevertheless approximate the normal distribution (King & Minium, 2003). Therefore, planned t-tests were performed using composites based on the original variable scores. Regarding planned analyses of variance (ANOVA), since the assumption of homogeneity of variance across groups was not met for several variables, general linear model univariate analysis of variance using Type II and Type III sums of squares methods were run and compared to results from a one-way ANOVA. As all three approaches yielded the same results, results from the one-way ANOVA were retained for interpretation. Cohen's (1992) definitions of small ($\eta^2 = .10$), medium ($\eta^2 = .25$), and large effect sizes ($\eta^2 = .40$) were used to interpret all ANOVA results.

Similarly, for planned correlation analyses, given the non-normality of several variables of interest, both Pearson and Spearman correlation coefficients were calculated for pairs of apathy and individual difference variables. Since only minor differences were obtained via different procedures, results from the Pearson method were retained for reporting and interpretation. Normalizing transformations were applied to all composites prior to conducting the multiple regression analyses.

Two-tailed tests and an alpha level of .05 were used for all statistical tests in the study. Where appropriate, effect sizes are displayed for each statistical test.

Descriptive Statistics

Participation and Interview Consent Comparisons

Gathering teacher nominations of students' school-related apathy allowed for comparisons of perceived apathy levels of participating and non-participating students. A chi-square analysis indicated that the decision to participate was independent of receiving one or more apathetic nominations from teachers. Likewise, apathy category scores were independent of participation status based on a chi-square analysis.

Data from participants were compared to determine whether differences germane to the present study distinguished those who did and did not agree to be interviewed. Eighth graders were significantly less likely to agree to be interviewed than were 10th graders, $\chi^2(1, N = 304) = 7.6228, p = .006$. This was likely reflective of parents' greater protectiveness towards younger students. Within grades, no significant differences were obtained for 8th graders for all demographic, apathy and individual difference variables. Tenth-grade interview participants reported significantly lower work avoidance, $t(135) = -2.412, p = .017, d = 0.51$, and significantly higher curiosity, $t(134) = 2.728, p = .007, d =$

0.61, than did non-interview participants; no significant differences were obtained for any other demographic, apathy or individual difference variables for 10th graders. For both grades, both apathy category and apathetic nomination category were independent of interview status. In order to draw conclusions about students representing all levels of school-related apathy, it was important to establish that neither apathy variable was dependent on participation or interview status.

Student Apathy and Individual Differences Data

Several sets of descriptive statistics were prerequisite to informing the research questions of the present study. In this section, tables of these descriptives are briefly presented; subsequent sections treating each research question refer back to them in greater detail.

To answer the first research question, means and standard deviations were calculated for all apathy composites using the full sample. These data were also disaggregated by grade in order to respond to the third research question. Table 7 presents these data. In view of the low reliability of the disengagement measure, individual items were analyzed in addition to the composite. Means and standard deviations for these items are presented in Table 8. Pearson correlations were also computed between apathy composites with the full sample and within grade level (see Table 9).

The second research question added individual differences to the analysis. Means and standard deviations for these five composites (boredom proneness, curiosity, distress, well-being, and GPA) are shown in Table 7, with data disaggregated by gender in Tables 10 through 12. Zero-order Pearson correlation coefficients are displayed in Tables 13 and 14.

Table 7

Descriptive Statistics for Apathy and Individual Differences

Variable	All				Grade 8			Grade 10			Grade 8, 10 Means Comparison	
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i> [†]	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>d</i>	<i>t</i>
Adolescent Apathy ^c	272	2.29	0.43	-27.48***	143	2.21	0.43	129	2.37	0.41	0.38	-3.14**
Apathy Syndrome ^b	271	1.57	0.34	-44.90***	142	1.57	0.34	129	1.57	0.34	0.01	-.05
Amotivation ^c	298	1.41	0.68	-40.57***	161	1.48	0.75	137	1.32	0.57	0.23	2.00
Disengagement ^c	297	1.35	0.29	-97.02***	159	1.33	0.31	135	1.37	0.28	0.11	-.98
Work Avoidance ^c	296	2.36	0.94	-11.77***	160	2.26	0.97	137	2.47	0.90	0.22	-1.91
Boredom Proneness ^f	275	0.34	0.16	16.59***	148	0.34	0.16	127	0.33	0.16	0.07	-.55
Curiosity ^d	293	4.74	0.90	14.04***	157	4.79	0.97	136	4.68	0.82	0.13	1.09
Distress ^c	283	2.24	0.70	-18.15***	153	2.17	0.71	130	2.33	0.67	0.24	-1.73
Well-Being ^c	287	3.11	0.72	2.65**	155	3.17	0.73	132	3.04	0.71	0.18	1.03
GPA ^e					164	85.10	8.37	130	3.49	0.51		

Note. Alpha superscripts from a to e indicate maximum possible value: a2.0, b4.0, c5.0, d7.0, e100/4.0.

^eGPA was recorded on different scales for 8th and 10th graders and is reported here only within grade. Although maximum value for 10th-grade GPA is theoretically 4.0, participating high schools gave extra credit for high course-load students.

[†]One-sample t-tests for merged grades were conducted against the midpoint value of each scale.

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

Table 8

Descriptive Statistics for Disengagement Items

Item (max value = 4.0)	All Grades				Grade 8			Grade 10			Grade 8, 10 Means Comparison	
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i> [†]	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>d</i>	<i>t</i>
1. Arrive late to school	297	1.25	.57	-52.80***	160	1.29	.66	137	1.19	.45	0.18	1.61
2. Arrive late to class	298	1.27	.52	-57.85***	161	1.12	.43	137	1.45	.56	0.65	-5.51***
3. Cut class	297	1.02	.17	-197.15***	160	1.04	.22	137	1.01	.08	0.18	1.59
4. Go to class unprepared (without books, notes, pen or pencil)	296	1.59	.63	-38.73***	161	1.60	.62	135	1.58	.63	0.04	.34
5. Go to class without having completed the homework	298	1.67	.73	-31.52***	161	1.64	.75	137	1.70	.71	0.08	-.72
6. Miss a day of school because of illness	298	1.43	.58	-46.35***	161	1.53	.62	137	1.32	.51	0.36	3.14**
7. Miss a day of school for a reason other than illness	298	1.30	.57	-51.55***	161	1.32	.63	137	1.27	.49	0.09	.80

Note. †t-test results shown for merged grades are based on one-sample t-tests for merged grades conducted against 3.0, the midpoint value of the scale. Not shown are one-sample t-tests against the lowest scale value, for which all items except the third were significant at $p=.000$. For item 3, $p=.019$.

** $p<0.01$, *** $p<0.001$.

Table 9

Zero-Order Pearson Correlations between Apathy Variables

Variable	1. AAI	2. AES	3. AMOT	4. DISENG
2. AES	.59*** (250)	—		
Gr. 8	.61*** (127)	—		
Gr. 10	.58*** (123)	—		
<i>q</i>	.06			
3. AMOT	.30*** (272)	.46*** (271)	—	
Gr. 8	.38*** (143)	.48*** (142)	—	
Gr. 10	.27** (129)	.44*** (129)	—	
<i>q</i>	.11	.06		
4. DISENG	.14* (270)	.33*** (268)	.27*** (294)	—
Gr. 8	.14 (142)	.31*** (141)	.28*** (159)	—
Gr. 10	.13 (128)	.36*** (127)	.28** (135)	—
<i>q</i>	.01	-.05	.00	
5. WAVD	.42*** (272)	.58*** (271)	.60*** (297)	.41*** (294)
Gr. 8	.40*** (143)	.57*** (142)	.65*** (160)	.39*** (159)
Gr. 10	.42*** (129)	.59*** (129)	.57*** (137)	.43*** (135)
<i>q</i>	-.03	-.01	.12	-.05

Note. *n* is shown in parentheses. Effect sizes (*q*) for grade-level differences in *r* were

computed as $\text{Fisher}(r_{\text{Grade } 8}) - \text{Fisher}(r_{\text{Grade } 10})$.

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

Table 10

Gender Differences

Variable	Males			Females			Means Comparison	
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>d</i>	<i>t</i>
Adolescent Apathy	111	2.35	0.41	161	2.25	0.44	0.23	1.83
Apathy Syndrome	114	1.63	0.36	157	1.53	0.32	0.28	2.29*
Amotivation	123	1.48	0.74	175	1.36	0.63	0.18	1.53
Disengagement	119	1.35	0.31	175	1.35	0.28	0.02	0.14
Work Avoidance	122	2.53	0.99	175	2.24	0.89	0.31	2.68**
Boredom Proneness	113	0.35	0.16	162	0.33	0.16	0.13	0.62
Curiosity	119	4.62	0.91	174	4.82	0.89	0.23	-1.94
Distress	117	2.05	0.59	166	2.38	0.74	0.50	-4.18***
Well-Being	118	3.25	0.60	169	3.02	0.78	0.34	2.89**
GPA ^a	121	-0.15	1.09	167	0.11	0.92	0.25	-2.15*

Note. ^aGPA scores were standardized within-grade.

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

Table 11

Gender Differences for Grade 8

Variable	Males			Females			Means Comparison	
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>d</i>	<i>t</i>
Adolescent Apathy	56	2.27	0.38	87	2.18	0.46	0.20	1.16
Apathy Syndrome	59	1.63	0.37	83	1.54	0.32	0.26	1.58
Amotivation	65	1.57	0.83	96	1.41	0.70	0.20	1.29
Disengagement	63	1.34	0.31	96	1.33	0.30	0.06	0.35
Work Avoidance	64	2.44	1.08	96	2.14	0.87	0.31	1.95
Boredom Proneness	60	0.36	0.16	88	0.34	0.16	0.13	0.71
Curiosity	61	4.64	1.00	96	4.89	0.94	0.26	-1.63
Distress	63	1.99	0.64	90	2.29	0.75	0.43	-2.67**
Well-Being	64	3.23	0.66	91	3.14	0.78	0.13	0.76
GPA†	65	-0.09	1.00	96	0.07	1.00	0.17	-1.04

Note. †GPA scores were standardized within-grade.

** $p < .01$.

Table 12

Gender Differences for Grade 10

Variable	Males			Females			Means Comparison	
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>d</i>	<i>t</i>
Adolescent Apathy	55	2.43	0.42	74	2.33	0.40	0.23	1.32
Apathy Syndrome	55	1.63	0.35	74	1.53	0.32	0.29	1.66
Amotivation	58	1.38	0.62	79	1.28	0.53	0.16	0.91
Disengagement	56	1.36	0.30	79	1.37	0.26	0.04	-0.23
Work Avoidance	58	2.63	0.88	79	2.35	0.90	0.31	1.77
Boredom Proneness	53	0.34	0.16	74	0.33	0.16	0.06	0.15
Curiosity	58	4.60	0.82	78	4.74	0.82	0.18	-1.01
Distress	54	2.12	0.52	76	2.48	0.73	0.58	-3.37**
Well-Being	54	3.28	0.53	78	2.88	0.77	0.62	3.60***
GPA†	56	-0.21	1.19	71	0.16	0.80	0.36	-1.96*

Note. †GPA scores were standardized within-grade.

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

Table 13

Zero-Order Pearson Correlations between Individual Difference Variables

Variable	BPS	CUR	DISTR	WB
7. CUR	-.29*** (272)	—		
Gr. 8	-.30*** (146)	—		
Gr. 10	-.29** (126)	—		
<i>q</i>	-.01			
8. DISTR	.48*** (262)	-.10 (279)	—	
Gr. 8	.62*** (141)	-.08 (150)	—	
Gr. 10	.33*** (121)	-.13 (129)	—	
<i>q</i>	.38	.05		
9. WB	-.45*** (265)	.22*** (282)	-.86*** (283)	—
Gr. 8	-.58*** (142)	.20* (151)	-.87** (153)	—
Gr. 10	-.30** (123)	.23** (131)	-.85*** (130)	—
<i>q</i>	-.36	-.03	-.06	
10. GPA†	-.25*** (264)	.20** (282)	-.08 (273)	.12* (276)
Gr. 8†	-.25** (148)	.17* (157)	-.17* (153)	.19* (155)
Gr. 10†	-.25** (116)	.24** (125)	.05 (120)	.03 (121)
<i>q</i>	.00	-.07	-.22	.16

Note. *n* is shown in parentheses. Effect sizes (*q*) for grade-level differences in *r* were

computed as $\text{Fisher}(r_{\text{Grade 8}}) - \text{Fisher}(r_{\text{Grade 10}})$.

†Calculations used within-grade standardized GPA scores.

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

Table 14

Zero-Order Pearson Correlations between Apathy and Individual Difference Variables

Variable	AAI	AES	AMOT	DISENG	WAVD
BPS	.43***(253)	.50***(253)	.33***(275)	.24***(272)	.47***(275)
Gr. 8	.45***(132)	.45***(133)	.38***(148)	.27** (147)	.47***(148)
Gr. 10	.45***(121)	.56***(120)	.25** (127)	.20* (125)	.48***(127)
<i>q</i>	.00	-.14	.14	.07	-.01
CUR	-.42***(269)	-.49***(268)	-.19***(293)	-.09 (290)	-.31***(293)
Gr. 8	-.40***(141)	-.47***(140)	-.24** (157)	-.08 (156)	-.27** (157)
Gr. 10	-.45***(128)	-.53***(128)	-.14 (136)	-.09 (134)	-.36***(136)
<i>q</i>	.07	.08	-.11	.01	.10
DISTR	.31*** (263)	.38***(259)	.30***(283)	.25***(281)	.32***(283)
Gr. 8	.30***(138)	.42***(135)	.40***(153)	.30***(152)	.35***(153)
Gr. 10	.29** (125)	.33***(124)	.18* (130)	.16 (129)	.26** (130)
<i>q</i>	.01	.10	.24	.15	.10
WB	-.38***(265)	-.46***(261)	-.36***(287)	-.23***(284)	-.32***(286)
Gr. 8	-.38***(139)	-.48***(136)	-.45***(155)	-.28***(153)	-.35***(154)
Gr. 10	-.36***(126)	-.43***(125)	-.24** (132)	-.15 (131)	-.26** (132)
<i>q</i>	-.02	-.07	-.24	-.14	-.10
GPA†	-.22***(262)	-.21***(261)	-.29***(287)	-.31***(283)	-.27***(286)
Gr. 8†	-.19* (143)	-.19* (142)	-.29***(161)	-.30***(159)	-.24** (160)
Gr. 10†	-.26** (119)	-.24** (119)	-.30** (126)	-.34***(124)	-.33***(126)
<i>q</i>	.07	.06	.02	.05	.10

Note. *n* is shown in parentheses. Effect sizes (*q*) for grade-level differences in *r* were computed as $\text{Fisher}(r_{\text{Grade 8}}) - \text{Fisher}(r_{\text{Grade 10}})$.

†Calculations used within-grade standardized GPA scores.

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

The first research question also explored the relation between folk and research-based conceptions of apathy, and the third research question examined grade-level differences in these relations. Several statistical analyses were conducted to respond to these questions. Table 15 displays student demographics for the two apathetic nomination groups. As stated earlier, students receiving at least one apathetic nomination were assigned to the “ ≥ 1 ” group; students receiving no apathetic nominations were assigned to the “0” group. The same analysis was also performed by apathy category, assigned according to the rules defined in Figure 9. These data appear in Table 16 for the full sample, and in Tables 17 and 18 for the 8th and 10th grades, respectively. To enable comparisons of apathy and individual differences according to teacher nominations of students’ apathy, means and standard deviations of apathy and individual differences were calculated for each apathetic nomination group and for each apathy category. Tables 19 through 23 present these results.

Research Question 1: Defining School-Related Apathy

The first research question posed in this study regarded the conceptualization and prevalence of school-related apathy. These issues were addressed via three distinct questions: To what extent are research-based conceptualizations of apathy toward school statistically independent? How do teachers and students conceptualize school-related apathy, and to what extent are those “folk constructs” consistent with research-based conceptualizations? How prevalent is school-related apathy in students, and how do students’ and teachers’ beliefs about its prevalence compare? Quantitative results for each question are presented sequentially.

Table 15

Demographics by Apathetic Nominations

Variable	Category	Merged Grades					Grade 8					Grade 10				
		0		≥1		χ^2	0		≥1		χ^2	0		≥1		χ^2
		<i>f</i>	%	<i>f</i>	%		<i>f</i>	%	<i>f</i>	%		<i>f</i>	%	<i>f</i>	%	
Gender (n=300)	Male	80	70.2	34	29.8	.03	40	70.2	17	29.8	.03	40	70.2	17	29.8	.21
	Female	121	71.2	49	28.8		62	68.9	28	31.1		59	73.8	21	26.3	
Grade (n=306)	8 th	103	68.7	47	31.1	.61										
	10 th	102	72.9	38	27.1											
Birth Year (n=293)	1990	16	64.0	9	36.0	1.06						16	64.0	9	36.0	.88
	1991	80	73.4	29	26.6							80	73.4	29	26.6	
	1992	22	68.8	10	31.3		22	68.8	10	31.3	.00					
	1993	77	69.4	34	30.6		77	69.4	34	30.6						
Ethnicity (n=294)	AA	5	55.6	4	44.4	12.23*	4	66.7	2	33.3	10.10	1	33.3	2	66.7	5.71
	NA	6	100	0	0.0		1	100	0	0.0		5	100	0	0	
	AP	1	16.7	5	83.3		0	0	4	100		1	50.0	1	50.0	
	EA	171	72.2	66	27.8		87	71.3	35	28.7		84	73.0	31	27.0	
	HA	9	69.2	4	30.8		7	77.8	2	22.2		2	50.0	2	50.0	
	Other	5	71.4	2	28.6		2	66.7	1	33.3		3	75.0	1	25.0	
Religion (n=296)	Catholic	178	71.5	71	28.5	.92	95	71.4	38	28.6	1.41	83	71.6	33	28.4	.66
	Protestant	2	50.0	2	50.0		1	50.0	1	50.0		1	50.0	1	50.0	
	Other	18	69.2	8	30.8		5	55.6	4	44.4		13	76.5	4	23.5	
Practice Religion (n=298)	Often	131	72.8	49	27.2	.86	77	74.0	27	26.0	3.79	54	71.1	22	28.9	.13
	Sometimes	33	67.3	16	32.7		8	53.3	7	46.7		25	73.5	9	26.5	
	Occasionally	24	68.6	11	31.4		15	65.2	8	34.8		9	75.0	3	25.0	
	Rarely/Never	12	66.7	6	33.3		2	50.0	2	50.0		10	71.4	4	28.6	

Note. Ethnicities: AA, African-American; NA, Native American; AP, Asian/Pacific Islander American; EA, European American; HA, Hispanic American. Chi-square values are reported, however low cell values limit interpretability.

* $p < .05$.

Table 16

Demographics by Apathetic Category, Full Sample

Variable		1 (Apathetic)		2 (Midrange)		3 (Not Apathetic)		4 (Mixed)		χ^2
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Gender (n=284)	Male	19	16.7	18	15.8	62	54.5	15	13.2	1.91
	Female	32	18.8	20	11.8	101	59.4	17	10.0	
Grade (n=290)	8 th	40	26.7	29	19.3	74	49.2	7	4.7	36.27**
	10 th	13	9.3	9	6.4	93	66.4	25	17.9	
Birth Year (n=277)	1990	4	16.0	0	0	16	64.0	5	20.0	34.07**
	1991	9	8.3	9	8.3	71	65.1	20	18.3	
	1992	8	25.0	5	15.6	17	53.1	2	6.3	
	1993	29	26.1	22	19.8	55	49.5	5	4.5	
Ethnicity (n=278)	AA	1	11.1	0	0	5	55.6	3	33.3	29.38*
	NA	0	0	1	16.7	5	83.3	0	0	
	AP	5	83.3	0	0	1	16.7	0	0	
	EA	40	16.9	33	13.9	138	58.2	26	11.0	
	HA	1	7.7	2	15.4	7	53.8	3	23.1	
	Other	2	28.6	1	14.3	4	57.1	0	0	
Religion (n=279)	Catholic	43	17.3	35	14.1	143	57.4	28	11.2	4.00
	Protestant	2	50.0	0	0	2	50.0	0	0	
	Other	4	15.4	3	11.5	15	57.7	4	15.4	
Practice	Often	30	16.7	26	14.4	105	58.3	19	10.6	6.63
Religion (n=282)	Sometimes	9	18.4	5	10.2	28	57.1	7	14.3	
	Occasionally	8	22.9	7	20.0	17	48.6	7	14.3	
	Rarely/Never	3	16.7	0	0	12	66.7	3	16.7	

Note. Ethnicities: AA, African-American; NA, Native American; AP, Asian/Pacific Islander American; EA, European American; HA, Hispanic American. Chi-square values are reported, however low cell values limit interpretability.

* $p < .05$, ** $p < .01$.

Table 17

Demographics by Apathetic Category, Grade 8

Variable	Category	1 (Apathetic)		2 (Midrange)		3 (Not Apathetic)		4 (Mixed)		χ^2
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Gender (n=147)	Male	14	24.6	13	22.8	27	47.4	3	5.3	.66
	Female	24	26.7	16	17.8	46	51.1	4	4.4	
Birth Year (n=143)	1992	8	25.0	5	15.6	17	53.1	2	6.3	.46
	1993	29	26.1	22	19.8	55	49.5	5	4.5	
Ethnicity (n=145)	AA	1	16.7	0	0	4	66.7	1	16.7	21.73
	NA	0	0	1	100	0	0	0	0	
	AP	4	100	0	0	0	0	0	0	
	EA	30	24.6	24	19.7	63	51.6	5	4.1	
	HA	1	11.1	2	22.2	5	55.6	1	11.1	
	Other	1	33.3	1	33.3	1	33.3	0	0	
Religion (n=144)	Catholic	32	24.1	27	20.3	68	51.1	6	4.5	2.61
	Protestant	1	50.0	0	0	1	50.0	0	0	
	Other	3	33.3	2	22.2	3	33.3	1	11.1	
Practice Religion (n=147)	Often	21	20.2	22	21.2	55	52.9	6	5.8	7.65
	Sometimes	6	40.0	2	13.3	6	40.0	1	6.7	
	Occasionally	8	34.8	5	21.7	10	43.5	0	0	
	Rarely/Never	2	50.0	0	0	2	50.0	0	0	

Note. Ethnicities: AA, African-American; NA, Native American; AP, Asian/Pacific Islander American; EA, European American; HA, Hispanic American. Chi-square values are reported, however low cell values limit interpretability.

* $p < .05$, ** $p < .01$.

Table 18

Demographics by Apathetic Category, Grade 10

Variable	Category	1 (Apathetic)		2 (Midrange)		3 (Not Apathetic)		4 (Mixed)		χ^2
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Gender (n=137)	Male	5	8.8	5	8.8	35	61.4	12	21.1	1.47
	Female	8	10.0	4	5.0	55	68.8	13	16.3	
Birth Year (n=143)	1990	48	16.0	0	0.0	16	64.0	5	20.0	.46
	1991	9	8.3	9	8.3	71	65.1	20	18.3	
Ethnicity (n=133)	AA	0	0.0	0	0.0	1	33.3	2	66.7	16.83
	NA	0	0.0	0	0.0	5	100.0	0	0.0	
	AP	1	50.0	0	0.0	1	50.0	0	0.0	
	EA	10	8.7	9	7.8	75	65.2	21	18.3	
	HA	0	0.0	0	0.0	2	50.0	2	50.0	
	Other	1	25.0	0	0.0	3	75.0	0	0.0	
Religion (n=135)	Catholic	11	9.5	8	6.9	75	64.7	22	19.0	4.33
	Protestant	1	50.0	0	0.0	1	50.0	0	0.0	
	Other	1	5.9	1	5.9	12	70.6	3	17.6	
Practice Religion (n=1)	Often	9	11.8	4	5.3	50	65.8	13	17.1	5.49
	Sometimes	3	8.8	3	8.8	22	64.7	6	17.6	
	Occasionally	0	0.0	2	16.7	7	58.3	3	25.0	
	Rarely/Never	1	7.1	0	0.0	10	71.4	3	21.4	

Note. AA, African-American; NA, Native American; AP, Asian/Pacific Islander American; EA, European American; HA, Hispanic

American. Chi-square values are reported, however low cell values limit interpretability.

Table 19

Apathy and Individual Differences by Apathetic Nomination

Variable	0			≥1			<i>d</i>	<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>		
Adolescent Apathy	183	2.26	0.42	75	2.37	0.40	0.27	-1.84
Grade 8	91	2.19	0.43	39	2.28	0.40	0.22	-1.13
Grade 10	92	2.33	0.40	36	2.46	0.39	0.33	-1.61
Apathy Syndrome	184	1.52	0.32	74	1.70	0.36	0.53	-3.79***
Grade 8	91	1.52	0.31	39	1.73	0.39	0.60	-3.25**
Grade 10	93	1.53	0.32	35	1.66	0.33	0.40	-2.05*
Amotivation	200	1.30	0.54	82	1.61	0.88	0.42	-2.95**
Grade 8	102	1.36	0.59	44	1.69	0.99	0.40	-2.06*
Grade 10	98	1.24	0.47	38	1.51	0.73	0.44	-2.15*
Disengagement	197	1.31	0.28	82	1.44	0.31	0.44	-3.41**
Grade 8	101	1.31	0.30	44	1.40	0.32	0.29	-1.61
Grade 10	96	1.32	0.25	38	1.49	0.29	0.63	-3.44**
Work Avoidance	199	2.23	0.83	82	2.66	1.07	0.45	-3.29**
Grade 8	101	2.16	0.91	44	2.49	1.08	0.33	-1.88
Grade 10	98	2.29	0.75	38	2.86	1.04	0.63	-3.08**
Boredom Proneness	184	0.32	0.15	78	0.39	0.17	0.44	-3.52**
Grade 8	93	0.32	0.15	43	0.39	0.17	0.44	-2.28*
Grade 10	91	0.31	0.15	35	0.39	0.17	0.50	-2.68**
Curiosity	198	4.81	0.91	80	4.60	0.90	0.23	1.77
Grade 8	101	4.91	0.98	42	4.60	0.96	0.32	1.75
Grade 10	97	4.71	0.81	38	4.61	0.84	0.12	0.68
Distress	191	2.20	0.68	77	2.38	0.75	0.25	-1.85
Grade 8	99	2.09	0.68	40	2.39	0.79	0.41	-2.22*
Grade 10	92	2.32	0.66	37	2.36	0.72	0.06	-0.32
Well-Being	194	3.15	0.69	78	2.96	0.76	0.26	2.06*
Grade 8	101	3.22	0.67	40	2.98	0.83	0.32	1.78
Grade 10	93	3.09	0.72	38	2.93	0.69	0.23	1.11
GPA [†]	197	0.21	0.83	81	-0.48	1.12	0.70	5.02***
Grade 8 [†]	103	0.27	0.79	46	-0.59	1.12	0.89	4.72***
Grade 10 [†]	94	0.15	0.88	35	-0.34	1.13	0.48	2.59*

Note. [†]GPA data are based on within-grade standardized scores.

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

Table 20

Disengagement Items by Apathetic Nomination Groups

Variable	0			≥ 1			<i>d</i>	<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>		
1. Arrive late to school	199	1.23	0.55	82	1.30	0.64	0.12	-1.03
Gr. 8	101	1.27	0.65	44	1.39	0.75	0.17	-0.97
Gr. 10	98	1.18	0.44	38	1.21	0.47	0.07	-0.31
2. Arrive late to class	200	1.27	0.51	82	1.30	0.56	0.06	-0.51
Gr. 8	102	1.13	0.41	44	1.14	0.51	0.02	-0.11
Gr. 10	98	1.42	0.55	38	1.50	0.56	0.14	-0.77
3. Cut class	200	1.02	0.17	82	1.02	0.16	0.00	-0.20
Gr. 8	102	1.03	0.22	44	1.05	0.21	0.09	-0.41
Gr. 10	98	1.01	0.10	38	1.00	0.00	0.14	0.62
4. Go to class unprepared	198	1.53	0.56	82	1.77	0.76	0.36	-2.62*
Gr. 8	102	1.58	0.59	44	1.70	0.73	0.18	-1.10
Gr. 10	96	1.47	0.52	38	1.84	0.79	0.55	-3.20**
5. Go to class without having completed the homework	200	1.54	0.65	82	1.98	0.85	0.58	-4.72***
Gr. 8	102	1.53	0.67	44	1.86	0.90	0.42	-2.48*
Gr. 10	98	1.54	0.63	38	2.11	0.76	0.82	-4.42***
6. Miss a day of school because of illness	200	1.42	0.55	82	1.40	0.61	0.03	0.24
Gr. 8	102	1.48	0.58	44	1.55	0.66	0.11	-0.60
Gr. 10	98	1.36	0.52	38	1.24	0.49	0.24	1.22
7. Miss a day of school for a reason other than illness	200	1.30	0.56	82	1.27	0.50	0.06	0.37
Gr. 8	102	1.32	0.63	44	1.25	0.49	0.12	0.69
Gr. 10	98	1.27	0.49	38	1.29	0.52	0.04	-0.26

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

Table 21

Apathy by Apathy Category

Variable	1 (Apathetic)			2 (Midrange)			3 (Not Apathetic)			4 (Mixed)			η^2	<i>F</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>		
Adolescent Apathy	45	2.35	0.42	36	2.38	0.45	147	2.23	0.41	30	2.39	0.38	0.03	2.32
Gr. 8	33	2.34	0.41	28	2.34	0.48	63	2.12	0.40	6	2.04	0.21	0.07	3.03*
Gr. 10	12	2.42	0.47	8	2.50	0.33	84	2.32	0.40	24	2.48	0.36	0.03	1.43
Apathy Syndrome	44	1.73 ^a	0.39	37	1.60 ^{a,b}	0.31	147	1.51 ^b	0.31	30	1.65 ^{a,b}	0.33	0.07	6.06**
Gr. 8	33	1.77 ^a	0.40	28	1.61 ^{a,b}	0.33	63	1.48 ^b	0.29	6	1.49 ^{a,b}	0.18	0.12	5.85**
Gr. 10	11	1.62	0.31	9	1.58	0.26	84	1.52	0.33	24	1.68	0.35	0.04	1.55
Amotivation	50	1.77 ^a	0.99	38	1.48 ^{a,b}	0.58	162	1.26 ^b	0.52	32	1.36 ^b	0.61	0.08	8.24***
Gr. 8	37	1.80 ^a	1.04	29	1.46 ^{a,b}	0.57	73	1.33 ^b	0.60	7	1.11 ^{a,b}	0.20	0.08	4.19**
Gr. 10	13	1.67 ^a	0.83	9	1.56 ^{a,b}	0.62	89	1.21 ^b	0.45	25	1.43 ^{a,b}	0.67	0.08	3.91*
Disengagement	50	1.44 ^a	0.35	37	1.42 ^{a,b}	0.33	160	1.29 ^b	0.26	32	1.44 ^a	0.25	0.06	6.05**
Gr. 8	37	1.41	0.34	29	1.43	0.34	72	1.26	0.27	7	1.33	0.22	0.06	3.03*
Gr. 10	13	1.53 ^a	0.37	8	1.40 ^{a,b}	0.27	88	1.31 ^b	0.25	25	1.47 ^a	0.26	0.09	4.30**
Work Avoidance	50	2.75 ^a	1.11	38	2.58 ^a	0.83	161	2.14 ^b	0.81	32	2.53 ^{a,b}	1.02	0.07	7.45***
Gr. 8	37	2.62 ^a	1.12	29	2.50 ^{a,b}	0.89	72	2.03 ^b	0.89	7	1.80 ^{a,b}	0.50	0.09	4.43*
Gr. 10	13	3.12 ^a	1.03	9	2.87 ^{a,b}	0.53	89	2.23 ^b	0.74	25	2.73 ^a	1.04	0.13	6.66***

Note. Means with no superscripts in common differed significantly in Tukey's HSD post-hoc analyses.

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

Table 22

Disengagement Items by Apathetic Category

Item	1 (Apathetic)			2 (Midrange)			3 (Not Apathetic)			4 (Mixed)			η^2	<i>F</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>		
1. Arrive late to school	50	1.34	0.74	38	1.37	0.75	161	1.19	0.49	32	1.25	0.44	0.02	1.46
Gr. 8	37	1.41	0.80	29	1.41	0.82	72	1.21	0.56	7	1.29	0.49	0.02	1.02
Gr. 10	13	1.15	0.55	9	1.22	0.44	89	1.18	0.44	25	1.24	0.44	0.00	0.16
2. Arrive late to class	50	1.26	0.60	38	1.39	0.64	162	1.24	0.47	32	1.38	0.49	0.01	1.29
Gr. 8	37	1.16 ^{a,b}	0.55	29	1.31 ^a	0.66	73	1.05 ^b	0.23	7	1.00 ^{a,b}	0.00	0.05	2.65
Gr. 10	13	1.54	0.66	9	1.67	0.50	89	1.39	0.56	25	1.48	0.51	0.02	0.89
3. Cut class	50	1.04	0.20	38	1.00	0.00	162	1.02	0.19	32	1.00	0.00	0.01	0.61
Gr. 8	37	1.05	0.23	29	1.00	0.00	73	1.04	0.26	7	1.00	0.00	0.01	0.42
Gr. 10	13	1.00	0.00	9	1.00	0.00	89	1.01	0.11	25	1.00	0.00	0.00	0.17
4. Go to class unprepared	50	1.88	0.87	38	1.65	0.68	161	1.50	0.53	32	1.59	0.50	0.05	4.98**
Gr. 8	37	1.76	0.76	29	1.72	0.70	73	1.52	0.53	7	1.43	0.53	0.03	1.66
Gr. 10	13	2.23 ^a	1.09	8	1.38 ^b	0.52	88	1.48 ^b	0.52	25	1.64 ^b	0.49	0.13	6.47***
5. Go to class without having completed the homework	50	1.88 ^{a,b}	0.87	38	1.66 ^{b,c}	0.67	162	1.51 ^c	0.64	32	2.13 ^a	0.79	0.09	8.73***
Gr. 8	37	1.81	0.88	29	1.62	0.62	73	2.14	1.07	7	2.14	1.07	0.05	2.63
Gr. 10	13	2.08 ^a	0.86	9	1.78 ^{a,b}	0.83	89	1.52 ^b	0.60	25	2.12 ^a	0.73	0.14	6.89***
6. Miss a day of school because of illness	50	1.54 ^a	0.68	38	1.61 ^a	0.64	162	1.38 ^{a,b}	0.52	32	1.19 ^b	0.40	0.04	4.35**
Gr. 8	37	1.62	0.68	29	1.62	0.68	73	1.42	0.52	7	1.14	0.38	0.04	2.15
Gr. 10	13	1.31	0.63	9	1.56	0.53	89	1.34	0.52	25	1.20	0.41	0.02	1.12
7. Miss a day of school for a reason other than illness	50	1.24	0.52	38	1.39	0.60	162	1.27	0.56	32	1.31	0.47	0.01	0.68
Gr. 8	37	1.27	0.51	29	1.48	0.63	73	1.26	0.62	7	1.14	0.38	0.03	1.23
Gr. 10	13	1.15	0.56	9	1.11	0.33	89	1.28	0.50	25	1.36	0.49	0.02	0.84

Note. Means with no superscripts in common differed significantly in Tukey's HSD post-hoc analyses.

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

Table 23

Individual Difference Variables by Apathy Category

Variable	1 (Apathetic)			2 (Midrange)			3 (Not Apathetic)			4 (Mixed)			η^2	F
	n	M	SD	n	M	SD	n	M	SD	n	M	SD		
Boredom Proneness	49	0.41 ^a	0.17	36	0.35 ^{a,b}	0.14	148	0.31 ^b	0.15	29	0.35 ^{a,b}	0.17	0.06	5.95 ^{**}
Gr. 8	36	0.41 ^a	0.18	27	0.36 ^{a,b}	0.15	66	0.31 ^b	0.15	7	0.29 ^{a,b}	0.08	0.08	3.61 [*]
Gr. 10	13	0.43	0.14	9	0.33	0.13	82	0.31	0.15	22	0.37	0.18	0.06	2.75 [*]
Curiosity	48	4.76 ^{a,b}	0.91	38	4.71 ^{a,b}	0.77	160	4.84 ^a	0.94	32	4.36 ^b	0.84	0.03	2.55
Gr. 8	35	4.71	0.94	29	4.74	0.82	72	4.97	1.03	7	4.02	0.93	0.05	2.42
Gr. 10	13	4.90	0.85	9	4.60	0.61	88	4.72	0.84	25	4.45	0.81	0.02	1.07
Distress	45	2.44	0.80	38	2.28	0.64	153	2.18	0.69	32	2.29	0.68	0.02	1.57
Gr. 8	33	2.51 ^a	0.81	29	2.30 ^{a,b}	0.69	70	2.01 ^b	0.67	7	1.83 ^{a,b}	0.37	0.10	4.75 ^{**}
Gr. 10	12	2.24	0.78	9	2.20	0.47	83	2.33	0.68	25	2.42	0.69	0.01	0.34
Well-Being	46	2.93	0.81	38	3.04	0.69	156	3.18	0.69	32	3.00	0.69	0.02	1.89
Gr. 8	33	2.88 ^a	0.87	29	2.97 ^{a,b}	0.72	72	3.32 ^b	0.62	7	3.43 ^{a,b}	0.32	0.08	4.05 ^{**}
Gr. 10	13	3.04	0.64	9	3.28	0.55	84	3.07	0.73	25	2.88	0.72	0.02	0.79
GPA [†]	49	-0.80 ^a	1.25	37	-0.26 ^b	0.67	160	0.32 ^c	0.83	32	0.01 ^{b,c}	0.67	0.19	21.61 ^{***}
Gr. 8 [†]	39	-0.64 ^a	1.16	29	-0.19 ^a	0.70	74	0.45 ^b	0.74	7	-0.32 ^{a,b}	0.92	0.23	14.37 ^{***}
Gr. 10 [†]	10	-1.44 ^a	1.44	8	-0.49 ^{a,b}	0.52	86	0.21 ^b	0.89	25	0.11 ^b	0.57	0.22	11.80 ^{***}

Note. Means with no superscripts in common differed significantly in Tukey's HSD post-hoc analyses.

[†]GPA data are based on within-grade standardized scores.

* $p < .05$, ** $p < .01$.

*Statistical Independence of Research-Based Conceptualizations of Apathy**Bivariate Correlations of Apathy Constructs*

Multiple statistical analyses were undertaken to assess the degree of independence of research-based apathy variables. First, zero-order correlations were computed to assess the relations between all bivariate combinations of apathy constructs, as shown in Table 9. Cohen (1992) defined small, medium, and large effect sizes for bivariate correlations as .10, .30, and .50, respectively. In the full sample all relations were positive as expected and, with the exception of disengagement, yielded moderate to strong effect sizes. Strong relations, all at $p < .000$, were found between adolescent apathy and apathy syndrome ($r = .59$); work avoidance was strongly correlated to both apathy syndrome ($r = .58$) and amotivation ($r = .60$). Disengagement was moderately correlated with apathy syndrome ($r = .33$) and work avoidance ($r = .41$).

These results suggest that notwithstanding some degree of independence among these variables, a great deal of variance is shared by the operationalization of these research-based constructs. This may be due to a direct relationship, or, alternatively, to an additional variable or variables. Of interest in light of prior research is the strong relation found in the present study between amotivation and work avoidance. Using highly similar operationalizations of both constructs in a sample of undergraduates, Smith and colleagues (2002) reported a bivariate correlation of .32. The lower correlation obtained in the older sample could be due to a differentiation of these constructs over time, such that they diminish in covariance. Additional research would be required to confirm this seedling hypothesis.

Test- and Item-Level Factor Analyses of Apathy Constructs

A second set of analyses entailed conducting factor analyses on the research-based apathy variables, first at the test level and then at the item level. For the test-level factor analysis, 5 factors were extracted using principal components analysis (PCA) with varimax rotation, using .400 as the cut point for factor loadings (Guadanogli & Velicer, 1988). Results are displayed in Table 24. Consistent with preliminary correlational analyses, each composite variable was the only item loading on a single factor, indicating independence among constructs. However, it bears noting that apathy syndrome loaded rather high on the adolescent apathy scale.

Given that PCA attempts to explain score variance and an aim of the present study was to determine the nature of relations among existing apathy constructs, principal axis factoring (PAF)—which seeks to relations, rather than variance, among variables—was also performed at the test-score level. Any PAF test will yield a maximum of $k-1$ factors, where k is the number of variables entered. The test-level PAF yielded three factors. As shown in Table 25, PAF results reinforce the interpretation of the bivariate correlations, suggesting that as operationalized in the present study, adolescent apathy and apathy syndrome are closely related, as are amotivation and work avoidance, and disengagement and work avoidance.

As anticipated in the study hypotheses, results from the PAF analysis suggested that greater parsimony could be obtained by a reconceptualization of the set of five constructs into a reduced set of variables. To explore this hypothesis, hybrid constructs were created. First, to determine the number of factors to extract, principal components analysis was performed at the item-level using all 61 items from the five apathy

Table 24

Test-level Exploratory Factor Analysis: PCA Factor Loadings for Rotated Components

	1	2	3	4	5
Adolescent Apathy	.948	.103	.031	.253	.161
Apathy Syndrome	<u>.318</u>	.221	.158	.875	.242
Amotivation	.107	.935	.119	.188	.255
Disengagement	.032	.110	.973	.122	.162
Work Avoidance	.199	<u>.311</u>	.216	.245	.870

Note. Extraction Method: Principal Component Analysis with Varimax Rotation

Table 25

Test-level Exploratory Factor Analysis: PAF Factor Loadings for Rotated Components

	1	2	3
Adolescent Apathy	.747	.178	.052
Apathy Syndrome	.707	<u>.343</u>	<u>.355</u>
Amotivation	.222	.668	.234
Disengagement	.088	.202	.561
Work Avoidance	<u>.361</u>	.647	.464

Note. Extraction Method: Principal Axis Factoring with Varimax Rotation

measures. Examination of the scree plot and factor eigenvalues indicated that two factors should be extracted. A second PCA was performed, extracting two factors and applying varimax rotation to increase factor clarity. Resultant factor loadings are displayed in Appendix N. Loadings of each item on the two factors were reviewed, and those not loading above .400 on a single factor were dropped from further analyses. The threshold of .400 was selected in light of Guadagnoli and Velicer's (1988) findings regarding the relation of sample size to component pattern stability.

Twenty-one items remained after this process. These items were again analyzed using PCA with varimax rotation, specifying extraction of two factors. These items and their resultant factor loadings are shown in Table 26; Table 27 displays factor correlations with each apathy variable. Examination of items for each factor suggested that Factor 1 pertained to school's irrelevance (Cronbach's $\alpha = .87$), and Factor 2 to participants' positive life interest (Cronbach's $\alpha = .76$). These hybrid factors were thus labeled School Irrelevant and Positive Life Interest, respectively. Together, they explained 42.7% of the total variance for this set of items. Participants' scores for each factor were generated using the regression method. Relations of the hybrid apathy factors to individual differences, as well as grade-level comparisons of factor structure, are taken up in the presentation of results for research questions two and three.

It must be emphasized that the creation of hybrid factors from a set of items developed for different constructs built upon different theoretical rationales is a highly exploratory affair and should be interpreted with great caution. Nevertheless, there are at least two reasons why the outcome of this analysis has important implications for future research. First, if independence existed in the operationalizations of the five constructs

assessed, then the exploratory item-level factor analysis with oblimin rotation should have resulted in items associated with each construct loading together on distinct factors. However, this result did not obtain.

The second observation worthy of attention is reinforced by the qualitative data presented in Chapter 5 and addressed in more detail in Chapter 6. It regards the theoretical coherence of the items that fell into the two hybrid factors. The first factor (School Irrelevant) indicates a conceptualization of school-related apathy, or of lack of motivation, in terms of perceived lack of reasons for being in school and a concomitant lack of volition to engage in school-related activities. A general attitude of interest toward life links the items on the second hybrid factor. As the data presented in Chapter 5 reveal, the concept of *interest* emerged strongly in folk conceptualizations of motivation, with “uninteresting” and “not being interested” arising frequently in students’ descriptions of their lack of motivation. Reasons, volition, and interest thus represent promising avenues to pursue towards greater insight into students’ lack of school-related motivation.

Cluster Analyses Using a Variate of Apathy Constructs

Whereas factor analyses examine the structure of a set of variables, cluster analyses offer insight into the structure of participants. Although cluster analysis is a non-statistical test and thus inappropriate for making population inferences, the structures which emerge provide a useful way to objectively measure distances between participants’ multivariate responses and to group those who are closest to one another in the response space. For purposes of the present study, cluster analyses offered a useful way both to identify apathy indicator patterns common to groups of students, as well as to obtain a sense of proportions of students in distinct apathy-level groupings.

Table 26

Factor Loadings for Exploratory School-Related Apathy Scale

Item		Loadings	
FACTOR 1 (School Irrelevant / Cronbach's $\alpha = 0.87$)			
B10	I don't care if I skip a day of school or a class.	0.531	-0.152
D1	Honestly, I don't know; I really feel that I am wasting my time in school.	0.754	-0.118
D2	I once had good reasons for going to school; however, now I wonder whether I should continue.	0.649	-0.098
D3	I can't see why I go to school and frankly, I couldn't care less.	0.793	-0.060
D4	I don't know; I can't understand what I am doing in school.	0.754	-0.034
E1	At school, I want to get others to do the work for me.	0.541	-0.355
E2	I wish I didn't have to do schoolwork.	0.662	-0.119
E3	I just want to do enough schoolwork to get by.	0.634	-0.303
E4	At school, I want to do things as easily as possible so I won't have to work very hard.	0.692	-0.219
E5	I want to get out of doing schoolwork.	0.741	-0.228
G5	(I) go to class without having completed the homework	0.523	-0.031
FACTOR 2 (Positive Life Interest / Cronbach's $\alpha = 0.76$)			
B4	I know what I would like to be when I am an adult.	0.002	0.433
B13	I can make a difference in terms of: changing school policies, affecting social and political issues.	-0.213	0.483
C1	I am interested in things.	-0.069	0.584
C3	Getting things started on my own is important to me.	-0.374	0.545
C4	I am interested in having new experiences.	-0.002	0.709
C5	I am interested in learning new things.	-0.239	0.668
C7	I approach life with intensity.	0.003	0.599
C8	Seeing a job through to the end is important to me.	-0.263	0.473
C9	I spend time doing things that interest me.	-0.119	0.572
C18	I have motivation.	-0.303	0.584

Note. Principal Components Analysis with Varimax Rotation.

Table 27

Correlations of New Apathy Factors to Apathy Variables

	Positive Life Interest		School Irrelevant	
	n	r	n	r
Positive Life Interest			273	-.00***
AAI	258	-.61***	272	.29***
AES	265	-.79***	270	.44***
AMOT	274	-.09	295	.88***
DISENGAGE	271	-.08	292	.45***
WAVD	274	-.30***	295	.85***

Note. Regression scores generated by the factor analyses were used for School Irrelevant and Positive Life Interest variables.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 28

Merged Grades Cluster Structure

High Apathy		Low Apathy	
Freq	%	Freq	%
49	19.8	199	80.2

Note. $n=248$. Hierarchical cluster analysis using complete linkage (furthest neighbor) method on standardized scores. Variate composed of Adolescent Apathy, Apathy Syndrome, Amotivation, Disengagement, Work Avoidance.

The present study employed hierarchical cluster analyses to create distinct participant profiles based on a multivariate composite of standardized scores on the five apathy variables. Analyses were conducted using the complete linkage (furthest neighbor) cluster method and squared Euclidean distances. Examination of the agglomeration schedule and cluster membership frequencies for solutions ranging from 2 to 6 clusters led to a decision to retain the 2-cluster structure. Roughly one-fifth of participants were assigned to Cluster 1, labeled High Apathy, and the remaining participants were grouped in Cluster 2, labeled Low Apathy (see Table 28).

Qualitative examinations of cluster differences in mean levels of apathy variables were also carried out (see Table 29 and Figure 11). Students in High Apathy appeared high on school-related apathy in comparison with those in Low Apathy. Individual disengagement items were also examined for mean differences, as shown in Table 30. Students in the high apathy cluster appeared more likely than other students to arrive late for class, to attend class without the needed materials, and to not complete their homework.

Research-Based and Folk Conceptualizations of Apathy

A component of the first research question in the present study asks to what degree research-based and folk conceptualizations of school-related apathy converge. As detailed in the following chapter, this query was largely addressed via qualitative methods, drawing on interview data and comparing the language of students and teachers to that of the apathy measure items. In addition, several quantitative methods were applied to respond to this question.

Specifically, participants' scores on the apathy measures represented a research-based description, while teacher nominations of students as either clearly apathetic, clearly non-apathetic, or midrange captured folk descriptions of students' apathy levels. This research design thus afforded comparisons of research-based and folk apathy conceptualizations via statistical tests for differences in mean levels of apathy variables between teacher-nominated apathy groups. As described in Chapter 3, two sets of apathy groups were created based on teacher nominations. A dichotomous Apathetic Nomination variable was created, with participants receiving one or more apathy nominations assigned to one group (" ≥ 1 ") and the remaining participants, having received no nominations for apathetic, assigned to the second group ("0"). A second variable with four levels was calculated for Apathy Category. The decision rules for classification into one of four apathy categories is presented in Figure 9.

As shown in Table 19, for the full sample, significant differences between the two apathetic nomination groups were found for all apathy variables except adolescent apathy. Similar results were found in omnibus tests between apathy categories (see Table 21). Membership in the two clusters created based on the five apathy variables was cross-tabulated with apathy classifications based on teacher nominations. The chi-square tests presented in Table 31 indicated that cluster membership was not independent of apathetic nomination or apathy category scores.

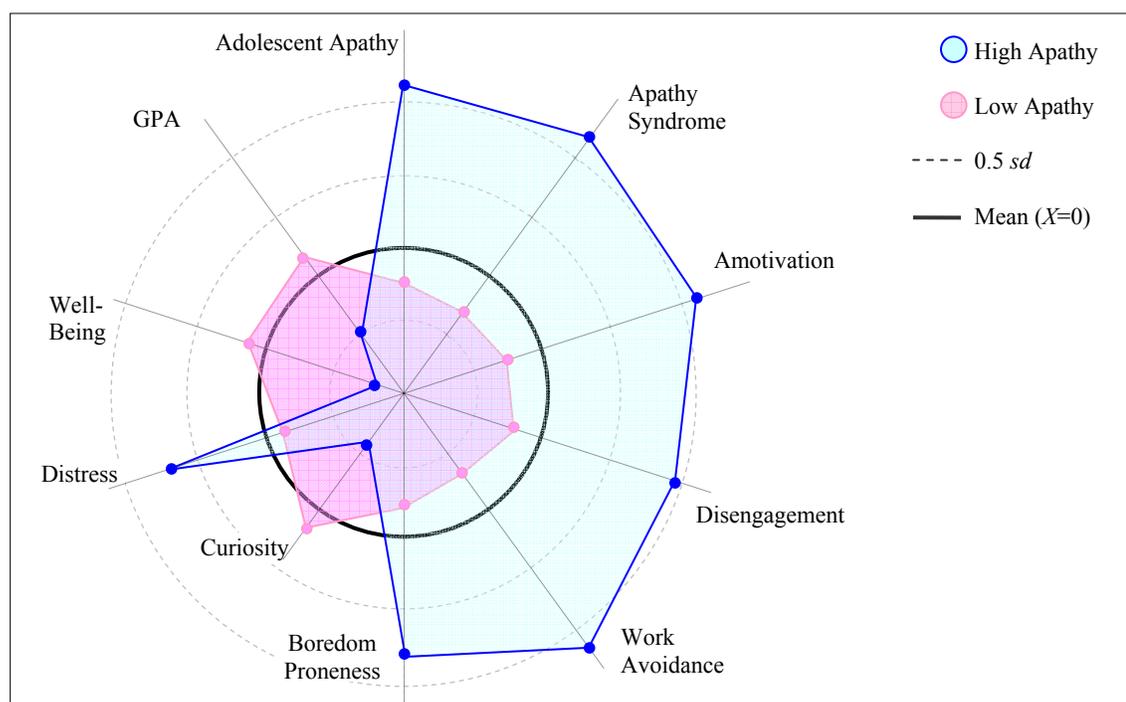
Although these findings suggest some agreement between research-based and folk apathy conceptualizations, examination of the cell data in Table 32 indicate that research-based and folk assignments of students reflect more agreement regarding who is *not* apathetic rather than who *is* apathetic. When cluster membership was cross-tabulated

Table 29

Merged Grades Cluster Structure: Apathy Variables

Variable	High Apathy			Low Apathy			<i>d</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
Adolescent Apathy	49	2.77	0.33	199	2.19	0.33	1.76
Apathy Syndrome	49	1.97	0.29	199	1.46	0.27	1.82
Amotivation	49	2.17	1.03	199	1.22	0.39	1.22
Disengagement	49	1.63	0.31	199	1.29	0.26	1.19
Work Avoidance	49	3.47	0.77	199	2.07	0.72	1.88

Figure 11

Cluster Scores on Apathy and Individual Difference Variables

Note. Standardized scores for each variable are plotted on the radial axes, with the dark solid ring marking $X=0$. Points outside the solid ring are above the mean; points within the solid ring are below the mean.

Table 30

Merged Grades Cluster Structure: Disengagement

Item	High Apathy		Low Apathy		<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
1. Arrive late to school	1.45	0.79	1.23	0.54	0.33
2. Arrive late to class	1.71	0.79	1.20	0.40	0.81
3. Cut class	1.02	0.14	1.03	0.19	0.06
4. Go to class unprepared (without books, notes, pen or pencil)	1.96	0.76	1.49	0.58	0.70
5. Go to class without having completed the homework	2.27	0.78	1.53	0.65	1.03
6. Miss a day of school because of illness	1.51	0.65	1.42	0.56	0.15
7. Miss a day of school for a reason other than illness	1.35	0.56	1.29	0.56	0.11

Note. $n=49$ for High Apathy; $n=199$ for Low Apathy.

Table 31

Merged Grades Cluster Structure: Apathetic Nomination and Apathy Categories

	High Apathy		Low Apathy		χ^2
	<i>f</i>	Row %	<i>f</i>	Row %	
Apathetic Nominations					
0	24	14.1	146	85.9	10.36**
≥1	22	32.4	46	67.6	($\omega^{\wedge} = .21$)
Apathy Category					
1	13	32.5	27	67.5	14.52**
2	9	26.5	25	73.5	($\omega^{\wedge} = .25$)
3	15	11.0	121	89.0	
4	9	32.1	19	67.9	

Note. Apathy Categories: 1-Apathetic; 2-Mid-range; 3-Non-Apathetic; 4-Mixed. ω^{\wedge} is the effect size proposed by Cohen (1988), who set small, medium, and large effect sizes at .1, .3, and .5, respectively.

Table 32

Discriminant Analysis Classifications: Apathetic Nomination by Apathy Variables

Teacher-Nominated Group Membership	Predicted Group Membership <i>f</i> (%)		Total
	0	≥1	
0	48 (71.6)	19 (28.4)	67
≥1	30 (44.1)	38 (55.9)	68

Note. 63.7% of original grouped cases correctly classified. All five apathy variables were entered as independent variables.

Table 33

Discriminant Analysis Classifications: Apathetic Category by Apathy Variables

Teacher-Nominated Group Membership	Predicted Group Membership f (%)				Total
	1	2	3	4	
1	8 (34.8)	4 (17.4)	5 (21.7)	6 (26.1)	23
2	4 (13.8)	9 (31.0)	7 (24.1)	9 (31.0)	29
3	2 (8.7)	6 (26.1)	13 (56.5)	12 (8.7)	23
4	4 (14.3)	11 (39.3)	4 (14.3)	9 (32.1)	28

Note. All five apathy variables were entered as independent variables. 37.9% of original grouped cases correctly classified. Apathy Categories: 1-Apathetic; 2-Midrange; 3-Non-Apathetic; 4-Mixed.

Table 34

Discriminant Analysis Classifications: Apathetic Categories 1-3 by Apathy Variables

Teacher-Nominated Group Membership	Predicted Group Membership f (%)			Total
	1	2	3	
1	11 (47.8)	8 (34.8)	4 (17.4)	23
2	5 (17.2)	17 (58.6)	7 (24.1)	29
3	4 (17.4)	7 (30.4)	12 (52.2)	23

Note. All five apathy variables were entered as independent variables. 53.3% of original grouped cases correctly classified.

with apathetic nomination, only 48% of students in the apathetic cluster were identified as such by teachers. However, 76% of research-identified non-apathetic students were placed in the same category by teachers. Similarly, only 13 (28%) students assigned to the apathetic cluster had parallel scores for apathy category. In contrast, nearly two-thirds (63%) of students were classified as non-apathetic by both teachers and research-based measures.

To further examine the degree of convergence between research-based and folk conceptualizations of school-related apathy, discriminant function analyses were conducted to classify participants based on the research-based apathy variables. Discriminant function analyses define orthogonal axes in the multivariate response space and use participants' scores on these axes to classify them into a pre-specified number of groups. As shown in Tables 33 and 34, discriminant analysis correctly classified less than two-thirds of participants into his or her apathetic nomination group, and roughly two-fifths (38%) of participants into his or her apathy category.

The results from the discriminant function analyses echo those obtained in cluster membership comparisons, with lower folk and research-based agreement in identifying apathetic students than non-apathetic students. For instance, while over 70% of respondents could be correctly classified as having received no apathetic nominations, only 56% of those receiving at least one apathetic nomination were correctly identified. Similarly, only about a third of students assigned to the highly apathetic category were classified as such by the research-based variables, in contrast to over half (56%) of those in the not apathetic category.

Taken together, these results indicate only a moderate degree of agreement between teacher nominations and research-based conceptualizations. In particular, it appears that the research-based operationalizations may be less useful for revealing school-related apathy relative to their ability to tap students' positive school-related motivation. The results of these tests, however, are to be interpreted with caution, since the larger size of the non-apathetic group makes it more likely for a case to be classified by chance into that group rather than in the smaller, apathetic, group. However, if it is the case that teacher nominations constitute a more valid assessment of students' school-related apathy, then greater sensitivity of self-report measures to students' lack of motivation is warranted. Alternatively, rather than a matter of sensitivity, the discrepancies between research- and teacher-based identifications of students with apathy may be due to the use of different standards or working definitions. Further consideration of this issue is taken up in the discussion in Chapter 6.

Prevalence of School-Related Apathy

Part three of the first research question asked how prevalent school-related apathy is among 8th- and 10th-grade students, and whether research-based and folk perspectives are similar or different in this respect. Using the full sample, several analyses were conducted to address this question quantitatively.

Research-Based Data

Raw-score means for each research-based apathy variable were examined for indications of prevalence. As shown in Table 7, data suggest that participants, while not entirely without negative school-related motivation, possessed low levels of the five apathy constructs assessed in the present study. To inform interpretation of the mean

scores, one-sample t-tests were performed for each variable except GPA, using the midpoint of the response scale as the test value.

Responses for amotivation were particularly low and highly right-skewed. It would thus appear that students in the present study perceived reasons for going to school. Disengagement was also very low, both as a composite and in terms of individual items (see Table 8). For instance, only 6 students, or 2% of the sample, indicated having cut class in the past two months. However, the data do indicate that overall participants somewhat frequently attend class without the necessary materials or without having completed the homework. It is worth noting that the disengagement composite yielded low reliability and therefore should be interpreted with caution. Data also indicate some work avoidance across the board, with average scores still significantly below the half-way point on the scale. Reported levels of both adolescent apathy and apathy syndrome were also low, though not entirely absent.

Frequencies of students in groups generated by cluster analyses were also examined. As displayed in Table 28, results from the present study suggested that roughly one in five participants could be described as reflecting school-related apathy. In weighing the ability of these results to inform research and practice, it is important to recall that the sample in the present study was drawn from students attending Catholic schools. In interviews, several teacher participants volunteered comparisons between their experiences in public and Catholic schools, stating that they perceived relatively greater prevalence of apathy in students at the public schools where they had worked.

Teacher Data

To assess teachers' perceptions of the prevalence of school-related apathy, proportions of students nominated as “clearly apathetic” were inspected. Nearly one-third (31.4%) of participants received at least one apathetic teacher nomination, and about one in five students (18.6%) were assigned to the apathetic category.

Comparing Research-Based and Teacher Data

These three data streams—raw-score means, cluster analyses, and teacher-nomination derived apathy classifications—were subsequently examined for convergence. As discussed earlier in this chapter, while there appeared to be some agreement in the proportions of students who were apathetic toward school, the data suggested that research-based and teacher assessments identified different students for this characterization. For instance, membership in the high school-apathy cluster included many students with no apathetic nominations, and many students were predicted into the low school-apathy cluster who had received apathetic nominations (see Table 31). The discriminant function analyses presented earlier support this interpretation, as only one half to two-thirds of participants could be correctly assigned to teacher-derived apathy categories based on quantitative apathy variables.

Research Question 2: Individual and Group Differences

The second research question asked: How is self-reported school-related apathy related to select individual and group differences variables and what patterns among those variables characterize groups of students? Apathy variables were expected to correlate moderately and positively with boredom proneness and distress, and to demonstrate moderate negative relations with curiosity, well-being and academic

achievement. This research question examined results for the full sample. Grade-level comparisons with respect to these analyses are presented in the following section which presents findings regarding the third research question.

School-Related Apathy and Individual Differences

Means and Correlations of Apathy and Individual Differences

Mean levels of individual difference variables are shown in Table 7. Overall, participants in the study reported moderately high levels of well-being ($M=3.11$, $SD=0.72$) and curiosity ($M=4.74$, $SD=0.90$). Low levels of boredom proneness ($M=0.34$, $SD=0.16$) and distress ($M=2.24$, $SD=0.70$) were detected for the full sample.

Bivariate correlations were calculated between pairs of individual differences variables and between individual differences and apathy variables, as shown in Tables 13 and 14. Curiosity and well-being were positively related ($r = .22$, $p = .000$). Since well-being was operationalized as a subset of items from the distress measure, the strong negative correlations between these variables was expected. For distress scores, small and non-significant relations were observed between curiosity ($r = -.10$, $p = .086$) and GPA ($r = -.08$, $p = .189$). As expected, boredom proneness was significantly and negatively correlated to curiosity ($r = -.29$, $p = .000$), GPA ($r = -.25$, $p = .000$), and well-being ($r = -.45$, $p = .000$), and significantly and positively related to distress ($r = .48$, $p = .000$).

Gender

Data for apathy and individual difference variables were also examined for gender differences. As presented in Table 10, for the full sample, males reported greater apathy syndrome, work avoidance, and well-being, and lower distress, than did females. On average, females had earned statistically higher GPAs in the previous academic year than

had males. This finding is consistent with prior research, which suggested that females report overall higher school-related motivation than do males (e.g., Eccles et al., 1993; Meece & Miller, 2001; Stoeber & Rambow, 2007; Wentzel, Weinberger, Ford, & Feldman, 1990). The outcomes for distress and well-being are reflective of research on self-concept and self-esteem (e.g., Määttä et al., 2002), with females faring worse on these variables, particularly in the early teen years, than do males.

Religion and Religious Practice

Since the sample was drawn from students attending Catholic schools, religion and the frequency with which students reported practicing their religion were included in analyses of individual differences in order to inform generalizability and future research. Table 35 presents comparisons of mean levels of apathy and individual difference variables by religion. Since the majority of students were Catholic, those reporting other religions were grouped into a second category (non-Catholic). Data indicate that Catholic students reported lower apathy syndrome, lower work avoidance, and less boredom proneness than did non-Catholics.

Mean levels of apathy and individual difference variables were also compared to reported level of religious practice. As shown in Table 36, participants who reported often practicing their religion also reported lower adolescent apathy, apathy syndrome, work avoidance, and boredom proneness, and higher GPA, than did participants who indicated they rarely or never practice their religion. Though these differences were significant in omnibus tests, the effect sizes were quite small, with η^2 ranging from .02 to .05.

There are several alternative explanations for these religion-related findings, which additional research could target. One possibility is that parents of non-Catholic students encountering difficulty in public schools opted to send their child to the Catholic school for the benefits of a private-school education. If this were the case, a sampling bias would have been present and potentially responsible for the observed differences. It is also important to keep in mind that the non-Catholic group included those professing Protestant, Jewish, or Orthodox faiths as well as those not adhering to any religion. Therefore these results are appropriately interpreted with great caution. Regarding the findings for religious practice, it bears stating that these data do not support a causal conclusion, i.e., that practice of religion is responsible for lower levels of apathy syndrome or lower levels of boredom proneness. The role that religion and extent of religious practice play in students' motivation for school, and vice versa, remains to be investigated in future research. Clearly, however, the generalizability of findings from the present study should be limited to Catholic school students in light of these differences, and future research is in order to explore these issues among public school students.

Multiple Regression of Individual Differences on New Apathy Composites

One aim of the present study was to explore the potential for a conceptualization of school-related apathy that would offer greater parsimony than existing sets of variables. Exploratory factor analyses performed in the present study identified two theoretically consistent factors with high reliability. To establish whether these hybrid factors offered comparable explanatory power relative to the five apathy composites, step-wise multiple regression analyses (MRA) were conducted to predict each of the five interval scale individual differences variables. Theoretically, if the hybrid factors were

Table 35

Religion Groups on Apathy and Individual Differences – Merged Sample

Variable	Catholic			Non-Catholic			Means Comparison	
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>d</i>	<i>t</i>
Adolescent Apathy	240	2.28	0.43	30	2.35	0.37	0.17	-0.88
Apathy Syndrome	238	1.55	0.33	30	1.71	0.35	0.47	-2.47*
Amotivation	264	1.39	0.65	31	1.58	0.87	0.25	-1.20
Disengagement	261	1.34	0.29	31	1.41	0.29	0.24	-1.30
Work Avoidance	263	2.30	0.93	31	2.92	0.89	0.68	-3.53***
Boredom Proneness	242	0.33	0.16	30	0.41	0.14	0.53	-2.70**
Curiosity	259	4.77	0.90	31	4.51	0.87	0.29	1.52
Distress	251	2.21	0.70	30	2.46	0.74	0.35	-1.83
Well-Being	254	3.13	0.71	31	2.96	0.80	0.22	1.44
GPA	255	0.01	1.00	29	-0.14	1.00	0.15	0.72

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

Table 36

Practice Religion by Apathy Variables – Merged Sample

Variable	1 (Often)			2 (Sometimes)			3 (Occasionally)			4 (Rarely/Never)			η^2	F
	n	M	SD	n	M	SD	n	M	SD	n	M	SD		
Adolescent Apathy	180	2.23 ^a	0.42	44	2.34 ^{a,b}	0.40	29	2.40 ^{a,b}	0.43	19	2.55 ^b	0.38	0.05	4.75 ^{**}
Apathy Syndrome	174	1.52 ^a	0.32	46	1.61 ^{a,b}	0.33	33	1.66 ^{a,b}	0.32	18	1.79 ^b	0.49	0.05	4.87 ^{**}
Amotivation	193	1.36	0.65	50	1.43	0.60	36	1.51	0.73	19	1.63	0.94	0.01	1.33
Disengagement	192	1.32 ^a	0.28	48	1.38 ^{a,b}	0.27	35	1.46 ^b	0.39	19	1.33 ^{a,b}	0.25	0.03	2.59
Work Avoidance	193	2.25 ^a	0.91	50	2.40 ^{a,b}	0.85	35	2.61 ^{a,b}	0.91	19	2.92 ^b	1.23	0.04	4.11 ^{**}
Boredom Proneness	174	0.33 ^a	0.17	48	0.35 ^{a,b}	0.16	34	0.33 ^{a,b}	0.11	19	0.44 ^b	0.16	0.03	3.12 [*]
Curiosity	189	4.81	0.97	50	4.73	0.75	35	4.65	0.70	19	4.28	0.74	0.02	2.15
Distress	189	2.19	0.70	43	2.41	0.73	33	2.23	0.64	18	2.40	0.71	0.02	1.59
Well-Being	190	3.18	0.73	45	3.03	0.72	34	3.01	0.69	18	2.87	0.74	0.02	1.61
GPA	189	0.12	0.99	45	-0.17	1.01	36	-0.31	0.99	17	-0.30	0.97	0.03	3.09 [*]

Note. Row means with no alpha superscripts in common were statistically different in Tukey's HSD post-hoc tests.

* $p < .05$, ** $p < .01$.

comparably efficient to the set of five apathy variables in terms of predicting the individual differences variables tapped in this study, large and significant changes in R^2 would be observed in the first step using only these two predictors. Further, entering the original five composites in the second step would not result in substantially greater explanation of variance in the dependent variables.

Accordingly, in the first step, the two new apathy factors (Positive Life Interest and School Irrelevant) were entered; the five original apathy variables were entered in the second step. Since many of these variables were not normally distributed, normalizing transformations were applied first to each variable to maximize approximation to the normal distribution. Amotivation was so severely skewed that transformations did little to correct the problem. In light of this fact, tests were run with and without the amotivation variable. Results are presented in Tables 37 and 38 for the full sample.

The new factors significantly increased the R^2 for all individual differences and for nearly all dependent variables, either one or both hybrid factors contributed significantly to the regression equation. Notably, adding the five research-based apathy variables did not significantly improve on explanation of variance for boredom proneness, curiosity, distress, or well-being when amotivation was excluded from analyses. With amotivation, the change in R^2 after step 2 was significant for well-being. Moreover, the effect sizes obtained for R^2 after step 1 were high, in light of Cohen's (1992) definitions of .02, .15, .35 for small, medium, and large effect sizes, respectively. These results support the hypothesis that school-related apathy could be tapped by a subset of items based on prior research into students' lack of motivation, offering greater simplicity with strong explanatory power.

Findings regarding GPA are also compelling, as these data suggest that outcomes aside from achievement are related to levels of school-related apathy, and that students can earn high GPAs without having developed an attitude of interest toward life. These results thus lend support to arguments in favor of including individual differences in addition to achievement when assessing educational outcomes.

Patterns in School-Related Apathy and Individual Differences

The second research question also sought to understand how individual differences varied with respect to school-related apathy patterns identified in the present study. Accordingly, data from teacher apathy nominations and results from factor and cluster analyses presented in the context of the first research question were examined for relations to individual differences data.

Individual Differences and Teacher Nominations

As the data in Table 19 illustrate, significantly higher boredom proneness, $t(260) = -3.52, p = .005, d = .44$, lower well-being, $t(270) = -2.06, p = .04, d = .26$, and lower GPA, $t(276) = 5.02, p = .000, d = .70$, characterized participants who had received at least one apathetic nomination from a teacher. Small effect sizes were also observed for curiosity, $d = .23$, and distress, $d = .25$, with means differing in the expected directions. However, the study lacked power to detect the statistical significance of these differences.

With respect to apathy category, similar results were obtained (see Table 21). Students classified as apathetic based on teacher nominations scored significantly higher on boredom proneness, $F(3,258) = 5.95, p = .004, \eta^2 = .06$, and lower on GPA, $F(3,274) = 21.61, p = .000, \eta^2 = .19$. The finding that those receiving mixed nominations (i.e., at least one apathetic and at least one non-apathetic nomination) scored lower on curiosity than those in the non-apathetic group, $F(3,274) = 2.55, p > .05, \eta^2 = .03$, potentially lends

Table 37

Merged Grades Multiple Regressions of Individual Difference Variables on All Apathy Variables

Predictor	Boredom Proneness		Curiosity		Distress [†]		Well-Being [†]		GPA [†]	
	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1		.320***		.211***		.173***		.181***		.082***
f^2		.47		.27		.21		.22		.09
PLI [†]	-.307***		.397***		-.201**		.218**		-.005	
SI [†]	.359***		-.112		.285***		-.281***		-.289***	
Step 2		.025		.022		.022		.042*		.079***
PLI [†]	-.189		.258*		-.200		.239*		-.084	
SI [†]	-.058		.193		.211		-.041		-.014	
AAI	.158*		-.154*		.139		-.144		-.157	
AES [†]	.038		-.070		-.087		.121		-.040	
AMOT	.073		-.077		.051		-.277*		-.121	
DISENG [†]	.078		.019		.125		-.100		-.303***	
WAVD [†]	.310		-.230		-.046		.029		.020	
Total		.346***		.233***		.195***		.223***		.161***
f^2		.52		.30		.24		.29		.19

Note. PLI: Positive Life Attitude; SI: School Irrelevant; AAI: Adolescent Apathy; AES: Apathy Syndrome; DISENG: Disengagement; WAVD: Work Avoidance.

Effect sizes (ES) are f^2 ; Cohen (1992) defines .02, .15, and .25 as small, medium, and large effect sizes for f^2 , respectively.

[†] Normalizing transformations were applied to these variables prior to performing multiple regression analyses.

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

Table 38

Merged Grades Multiple Regressions of Individual Difference Variables on All Apathy Variables except Amotivation

Predictor	Boredom Proneness		Curiosity		Distress [†]		Well-Being [†]		GPA [†]	
	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1		.320***		.211***		.173***		.181***		.082***
f^2		.47		.27		.21		.22		.09
PLI [†]	-.307***		.397***		-.201**		.218***		-.005	
SI [†]	.359***		-.112		.285***		-.281***		-.289***	
Step 2		.023		.021		.021		.021		.075***
PLI [†]	-.171		.240*		-.188		.177		-.111	
SI [†]	.055		.072		.292		-.478**		-.202	
AAI	.154*		-.149		.136		-.126		-.148	
AES [†]	.067		-.099		-.066		.011		-.089	
DISENG [†]	.063		.035		.115		-.043		-.278***	
WAVD [†]	.248		-.164		-.091		.271		.125	
Total		.344***		.232***		.195***		.202***		.157***
f^2		.52		.30		.24		.25		.19

Note. $n=232$. PLI: Positive Life Attitude; SI: School Irrelevant; AAI: Adolescent Apathy; AES: Apathy Syndrome; DISENG: Disengagement; WAVD: Work Avoidance.

Effect sizes are f^2 ; Cohen (1992) defines .02, .15, and .25 as small, medium, and large effect sizes for R^2 , respectively.

[†]Normalizing transformations were applied to these variables prior to performing multiple regression analyses.

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

some credence to the validity of the teacher nomination process. It is possible that students receiving mixed reviews may have narrower interests, perhaps associated with fewer domains, and consequently teachers of some subjects would be exposed to these students' curiosity while teachers of other subjects of less interest to these students would appropriately construct a perception of them as apathetic. These students would also be expected to report less curiosity than students who find all their class subjects motivating and thus induce teachers' perceptions that they are non-apatetic toward school.

Factor Correlations

In responding to the first research question in the present study, two school-related apathy factors were created from a subset of items used to tap the five apathy constructs assessed. To address the second research question, relations between these new factors and individual differences were analyzed. Results are presented in Table 39. Consistent with other findings in this study, moderate to strong positive relations were observed between the positive life interest factor and curiosity ($r = .48, p = .000$) and well-being ($r = .31, p = .000$). Positive Life Interest was significantly negatively related to boredom proneness ($r = -.36, p = .000$). A small but non-significant effect size was detected between Positive Life Interest and GPA ($r = .09, p = .143$). As would be expected, distress was negatively correlated with positive life interest ($r = -.24, p = .000$).

Scores on the school irrelevant factor also yielded significant relations with individual differences, correlating moderately strongly with boredom proneness ($r = 0.41, p = .000$) and moderately with curiosity ($r = -.20, p = .001$), distress ($r = .31, p = .000$), well-being ($r = -.33, p = .000$), and GPA ($r = -.32, p = .000$) in the expected directions. Notably, these results suggest that while indicators that students perceive school as irrelevant are negatively associated with GPA, positive life interest is not related to GPA,

Table 39

Correlations of New Apathy Factors to Individual Difference Variables

	Positive Life Interest		School Irrelevant	
	n	r	n	r
Boredom Proneness	254	-.47***	273	.46***
Curiosity	271	.48***	291	-.20**
Distress	263	-.24***	282	.31***
Well-Being	265	.31***	284	-.33***
GPA	264	.09	285	-.32***

Note. Regression scores generated by the factor analyses were used for School Irrelevant and Positive Life Interest variables.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 40

Merged Grades Cluster Structure: Individual Differences Variables

Variable	High Apathy			Low Apathy			<i>d</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
Boredom Proneness	44	0.48	0.15	188	0.31	0.15	1.13
Curiosity	49	4.21	0.78	197	4.86	0.91	0.77
Distress	48	2.75	0.77	191	2.15	0.66	0.84
Well-Being	48	2.52	0.77	193	3.21	0.67	0.96
GPA [†]	47	-0.52	1.27	191	0.17	0.89	0.63

Note. [†]GPA data are based on within-grade standardized scores.

a finding with interesting implications for how educational outcomes are socially valued and psychometrically assessed.

Cluster Group Means Comparisons

In cluster analyses of all participants' research-based apathy scores, two groups emerged. These groups were expected to vary in mean levels on criterion variables. As shown in Table 40, clusters differed on all five individual difference variables, with large effect sizes observed for boredom proneness, distress, and well-being, and moderate effect sizes observed for curiosity and GPA. It would also appear that members of Cluster 1 evidenced less curiosity, well-being, and GPAs, and higher levels of distress and boredom proneness, than did participants assigned to Cluster 2.

Item Analysis of School-Related Apathy and Individual Difference Measures

When examining associations between variables, it is important to consider the extent to which operational similarities rather than conceptual relations are responsible for large effects. With regard to the present study, items used to assess each construct were carefully reviewed for overlap in item content that could account for strong correlations. The complete set of 97 items for the 5 apathy constructs and 4 individual difference variables were examined for redundancy. Seven pairs of items from different measures were found to be highly comparable. Specifically, three item pairs were observed between the apathy syndrome and curiosity measures. Item pairs were also detected between the boredom proneness measure and the measures for adolescent apathy, amotivation, and distress.

1. ***Apathy Syndrome***: I am interested in learning new things.

Curiosity: I would describe myself as someone who actively seeks as much information as I can in a new situation

2. ***Apathy Syndrome***: I approach life with intensity.

Curiosity: My friends would describe me as someone who is “extremely intense” when in the middle of doing something.

3. ***Apathy Syndrome***: I am interested in having new experiences

Curiosity: Everywhere I go, I am out looking for new things or experiences.

4. ***Boredom Proneness***: Many people would say that I am a creative or imaginative person.

Adolescent Apathy: I am a creative, imaginative person.

5. ***Boredom Proneness***: I am often trapped in situations where I have to do meaningless things.

Amotivation: Honestly, I don’t know; I really feel that I am wasting my time in school.

6. ***Boredom Proneness***: Much of the time I just sit around doing nothing.

Distress: I get into such a bad mood that I feel like just sitting around and doing nothing.

7. ***Boredom Proneness***: I get a kick out of most of the things I do.

Distress: I’m the kind of person who has a lot of fun.

Although these item pairs would have contributed to the observed relations between variables, the analysis of all 97 items suggests that substantive semantic differences individuated measures used to tap these variables. The only exception to this conclusion regards the relation observed between apathy syndrome and curiosity, which should be interpreted with caution given that these measures had three items in common.

Research Question 3: Grade-Level Differences

The third and final research question asked: Is there variation between 8th and 10th graders in the conceptualization, prevalence, and associated individual differences of self-reported school-related apathy? To respond to this question using quantitative data, essentially all analyses conducted for research questions 1 and 2 were also performed individually by grade level. Within-grade patterns were examined, as were results between grades, for significant differences and noteworthy trends. In this section, results related to each aspect of the research question—conceptualization, prevalence, and individual differences—are addressed in turn.

Conceptualization of School-Related Apathy

Based on the extant literature (e.g., Gottfried, Fleming, & Gottfried, 2001; Harter, 1998; Otis, Grouzet, & Pelletier, 2005), the present study hypothesized that older students would reflect higher differentiation than would students on the threshold of adolescence. Differentiation was operationalized in several ways, and the two sources of quantitative data in the present study enabled examination of grade-level differences in research-based and folk conceptualizations of school-related apathy. Specifically, tests were conducted to detect significant differences and meaningful effect sizes between grades with respect to variance on apathy variables, bivariate correlations between apathy variables, and frequency distributions of teacher nominations for school-related apathy. In addition, results from factor and cluster analyses were compared between grades to identify structural differences. Further, these analyses allowed for grade-level comparisons between research-based and folk conceptualizations.

Research-Based Conceptualizations

Levene's test for equality of variances yielded significant between-grade differences only for the amotivation variable ($F= 4.68, p=.031$). Contrary to expectations, greater variance was reported by 8th graders ($SD=0.75$) than by 10th graders ($SD=0.57$; see Table 7). As presented in Table 9, correlation coefficients were also compared between grades. Cohen (1992) set small, medium, and large effects for differences in product-moment r at .10, .30, and .50, respectively. Small effects were obtained for amotivation's bivariate relations to adolescent apathy, $q = .11$, and work avoidance, $q = .12$, with 8th graders reporting stronger associations than did 10th graders. These effects were not detected as significant, an unsurprising outcome in light of the requisite sample size of over 1,500 for small effects.

Structure was examined in terms of principal components analysis and cluster analysis. The same factor analysis methods described for research question 1 were applied to the disaggregated data. No evidence of between-grade differences in factor structure emerged. This is not surprising given the similar bivariate correlations between apathy variable pairs.

In contrast to results obtained for the merged grades, cluster analyses yielded distinct patterns between grade levels. Using a variate composed of the five apathy variables, cluster analyses were conducted separately by grade. For the 8th grade, examination of the agglomeration schedule informed a decision to retain four clusters. Tables 41 through 43 and Figure 12 present the results. These data suggest that a small proportion (7.1%) of 8th-grade participants suffered from somewhat pronounced levels of school-related apathy, as evidenced by moderate adolescent apathy ($M = 2.66, SD = .43$),

moderate apathy syndrome ($M = 2.06$, $SD = .49$), high amotivation ($M = 3.64$, $SD = .73$), moderate disengagement ($M = 1.78$, $SD = .49$), and high work avoidance ($M = 4.09$, $SD = .84$). Remaining participants were grouped in equal numbers across three additional clusters.

Between the four clusters, large effect sizes were observed for amotivation ($\eta^2 = .78$) and work avoidance ($\eta^2 = .66$). Considering that clusters were derived from the five apathy variables, it is unsurprising that large effect sizes were found for all research-based apathy indicators. This result only indicates that all five variables seem to have contributed to cluster definition. Students in the Cluster 3 do not appear to manifest signs of school-related apathy, whereas Clusters 2 and 4 are both composed of students with some evidence of school-related apathy. Contrasting levels of amotivation and disengagement distinguish participants in Clusters 2 and 4. To facilitate interpretation, clusters were labeled based on relative scores on apathy variables and ordered from highest to lowest levels of apathy. These labels are displayed in Tables 42 and 43 and in Figure 12.

Parallel analyses were conducted with the data for grade 10. Here as well, four clusters were retained for analysis (see Tables 44 through 46). Most students fell into one of two clusters, with a little over 17% distributed in Clusters 2 and 4. Clusters 1 and 2 differed on all five apathy variables, with Cluster 1 claiming participants who did not show signs of school-related apathy. Cluster 2 students appear to be high on school-related apathy, as do members of Cluster 3, though to a lesser extent. The fourth cluster poses something of an anomaly, with low adolescent apathy, apathy syndrome, and amotivation, but moderate disengagement and work avoidance. Figure 13 presents

Table 41

Grade 8 4-Cluster Structure

1-High Apathy		2-Moderate General Apathy		3-Moderate School Apathy		4-Low Apathy	
Freq	%	Freq	%	Freq	%	Freq	%
9	7.1	39	31.0	39	31.0	39	31.0

Note. Hierarchical cluster analysis using complete linkage (furthest neighbor) method on standardized scores. Variate composed of Adolescent Apathy, Apathy Syndrome, Amotivation, Disengagement, Work Avoidance.

Table 42

Grade 8 4-Cluster Structure: Apathetic Nomination and Apathy Categories

	1-High Apathy		2-Moderate General Apathy		3-Moderate School Apathy		4-Low Apathy		χ^2
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Apathetic Nominations									
0	4	4.8	26	31.3	29	34.9	24	28.9	2.80
≥1	4	11.8	11	32.4	8	23.5	11	32.4	($\omega^2 = .15$)
Apathy Category									
1	4	13.8	10	34.5	6	20.7	9	31.0	6.62
2	2	7.4	9	33.3	7	25.9	9	33.3	($\omega^2 = .20$)
3	2	3.6	17	30.4	22	39.3	15	26.8	
4	0	0.0	1	20.0	2	26.8	2	40.0	

Note. Apathy Categories: 1-Apathetic; 2-Mid-range; 3-Non-Apathetic; 4-Mixed.

ω^2 is the effect size proposed by Cohen (1988), who set small, medium, and large effect sizes at .1, .3, and .5, respectively.

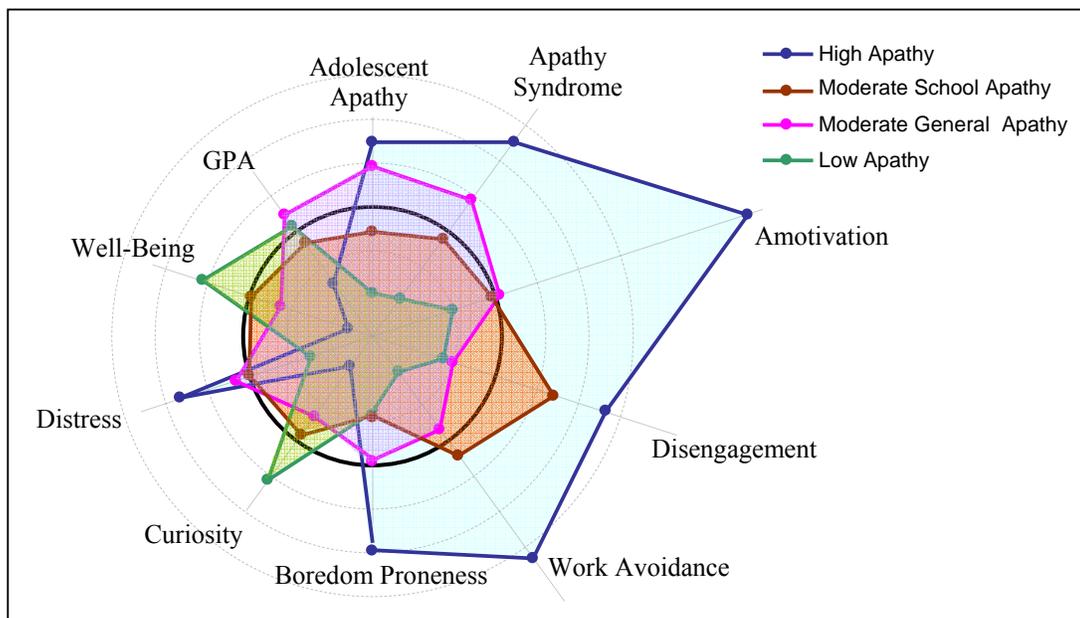
Table 43

Grade 8 4-Cluster Structure: Apathy and Individual Differences Descriptive Statistics

	1-High Apathy		2-Moderate General Apathy		3-Moderate School Apathy		4-Low Apathy		η^2
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Adolescent Apathy	2.66	0.43	2.53	0.31	2.19	0.34	1.87	0.28	0.46
Apathy Syndrome	2.06	0.49	1.76	0.27	1.56	0.27	1.25	0.14	0.47
Amotivation	3.64	0.73	1.49	0.59	1.42	0.41	1.08	0.17	0.66
Disengagement	1.78	0.49	1.21	0.19	1.59	0.25	1.18	0.21	0.54
Work Avoidance	4.09	0.84	2.27	0.76	2.64	0.64	1.47	0.44	0.19
Boredom Proneness	0.56	0.15	0.36	0.16	0.36	0.15	0.27	0.13	0.19
Curiosity	3.79	0.71	4.48	0.79	4.71	0.83	5.33	1.12	0.22
Distress	2.92	0.91	2.42	0.66	2.29	0.75	1.74	0.52	0.27
Well-Being	2.26	.93	2.86	0.74	3.14	0.69	3.61	0.40	0.07
GPA [†]	-0.69	0.89	0.31	1.01	-0.09	1.00	0.16	0.92	0.45

Note. [†]GPA data are based on within-grade standardized scores.

Figure 12

Graphic Representation of Grade 8 Clusters

Note. Each radial axis represents a single variable. Rings are spaced by $\frac{1}{2}$ standard deviations, with the mean ($X = 0$) denoted by the dark solid ring. Thus, points outside the solid ring indicate values above the mean; points inside the ring are below the mean. Each polygon represents a single cluster. From this chart we see, for example, that students in the Low Apathy cluster were close to the grand mean for boredom proneness and that the average standardized work avoidance score for students in the High Apathy cluster was a little over 1.5. This representation is intended to facilitate interpretation of between-cluster differences and similarities. Specific values of cluster means are displayed in tables.

profiles of the 10th-grade clusters, using the same labels assigned to grade 8 clusters to aid in meaningful interpretation of the data.

To examine the data for grade-level differences in structure, results from the two sets of cluster analyses were compared. Although four clusters emerged for both grades, their profiles differed in multiple respects. Table 47 sets results from grade 8 alongside those from grade 10 to facilitate interpretation, with clusters listed in order from highest to lowest indications of school-related apathy. Figures 14 through 19 display visual representations for pairs of similar clusters for each grade.

Students in both grades who belong to the High Apathy cluster represent similar proportions of participants (7%) for their grade level. High-Apathy students in grade 8 reported higher amotivation ($M = 3.64$, $SD = .73$) than did 10th graders in that cluster ($M = 2.94$, $SD = .35$). For both grades, closer examination suggested that it was their levels of amotivation and work avoidance that set them apart from the next-highest apathy cluster. In each grade, two distinct groups of students emerged with what could be described as moderate school-related apathy.

In contrast, 10th graders in the two moderate clusters reported notably different mean levels of adolescent apathy, apathy syndrome, and disengagement. Within the 10th grade, Moderate General Apathy participants had higher adolescent apathy ($M = 2.72$, $SD = .27$) and higher apathy syndrome ($M = 1.82$, $SD = .27$) than that reported by Moderate School Apathy participants ($M = 2.07$, $SD = .26$; $M = 1.43$, $SD = .14$). However, Moderate School Apathy students in grade 10 were higher on disengagement ($M = 1.69$, $SD = .19$) than were Moderate General Apathy 10th-grade participants ($M = 1.31$, $SD = .24$).

Table 44

Grade 10 4-Cluster Structure

1		2		3		4	
Freq	%	Freq	%	Freq	%	Freq	%
46	37.7	8	6.6	53	43.4	15	10.6

Note. $n=248$. Hierarchical cluster analysis using complete linkage (furthest neighbor) method on standardized scores. Variate composed of Adolescent Apathy, Apathy Syndrome, Amotivation, Disengagement, and Work Avoidance.

Table 45

Grade 10 Cluster Structure: Apathetic Nomination and Apathy Categories

	1-Low Apathy		2-High Apathy		3-Moderate General Apathy		4-Moderate School Apathy		χ^2
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Apathetic Nominations									
0	41	47.1	2	2.3	36	41.4	8	9.2	16.24***
≥1	5	14.7	5	14.7	17	50.0	7	20.6	($\omega^2=.34$)
Apathy Category									
1	0	0	3	27.3	4	36.4	4	36.4	30.52***
2	1	14.3	0	0	4	57.1	2	28.6	($\omega^2=.51$)
3	40	50.0	2	2.5	32	40.0	6	7.5	
4	5	21.7	2	8.7	13	56.5	3	13.0	

Note. Apathy Categories: 1-Apathetic; 2-Mid-range; 3-Non-Apathetic; 4-Mixed.

*** $p<.001$.

ω^2 is the effect size proposed by Cohen (1988), who set small, medium, and large effect sizes at .1, .3, and .5, respectively.

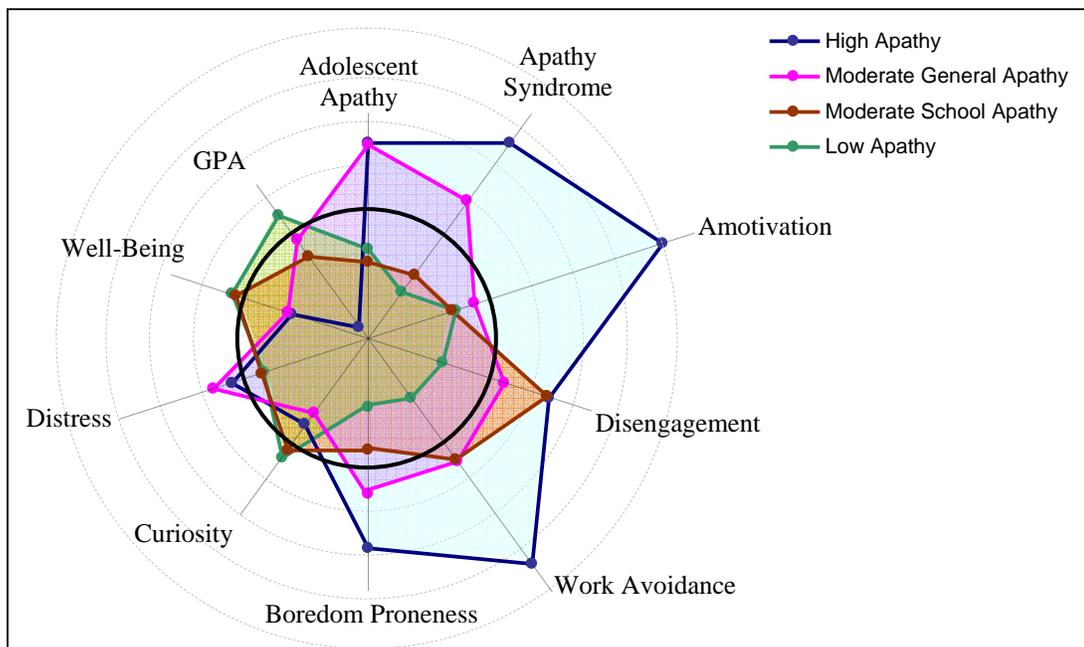
Table 46

Grade 10 Cluster Structure: Apathy and Individual Differences

	High Apathy (<i>n</i> =8)		Moderate General Apathy (<i>n</i> =53)		Moderate School Apathy (<i>n</i> =15)		Low Apathy (<i>n</i> =46)		η^2
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Adolescent Apathy	2.66	0.36	2.66	0.31	2.04	0.23	2.12	0.29	0.48
Apathy Syndrome	2.07	0.32	1.76	0.24	1.39	0.15	1.30	0.16	0.60
Amotivation	2.94	0.35	1.31	0.43	1.12	0.23	1.14	0.39	0.56
Disengagement	1.58	0.32	1.42	0.28	1.58	0.26	1.19	0.17	0.27
Work Avoidance	4.13	0.48	2.66	0.77	2.65	0.74	1.79	0.50	0.47
Boredom Proneness	0.44	0.15	0.39	0.15	0.30	0.09	0.25	0.14	0.22
Curiosity	4.55	0.98	4.40	0.76	4.90	0.79	5.00	0.77	0.12
Distress	2.41	0.76	2.57	0.66	2.14	0.54	2.13	0.70	0.09
Well-Being	2.73	0.50	2.76	0.71	3.26	0.49	3.28	0.74	0.13
GPA [†]	-1.33	1.50	-0.04	1.06	-0.07	0.42	0.35	0.82	0.15

Note. [†]GPA data are based on within-grade standardized scores.

Figure 13

Graphic Representation of Grade 10 Clusters

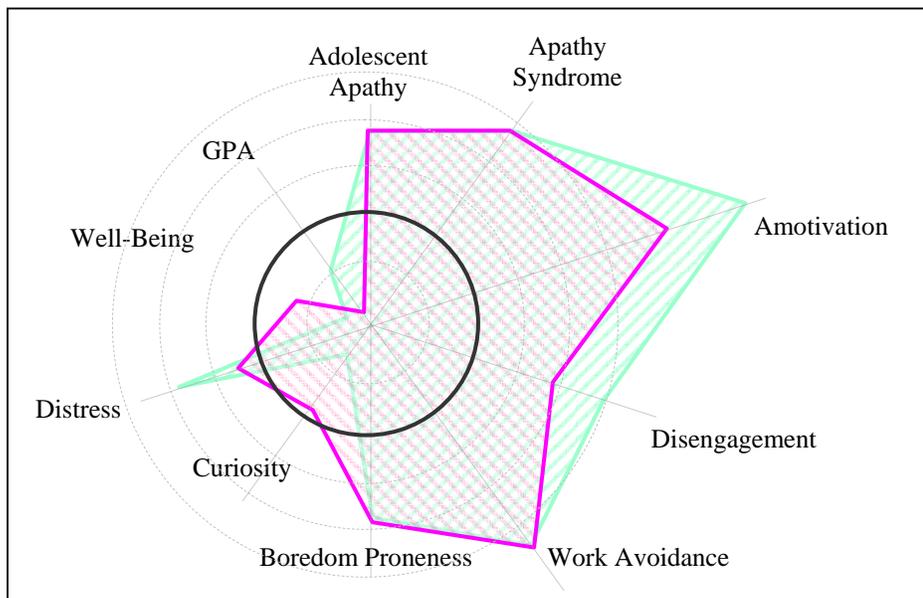
Note. Each radial axis represents a single variable. Rings are spaced by .5 standard deviations, with the mean ($X = 0$) denoted by the dark solid ring. Thus, points outside the solid ring are above the grand mean and points inside the solid ring are below the grand mean. Each cluster is depicted by a polygon formed by connecting the cluster mean plots on the radial axes. From this chart it appears that students in the Low Apathy cluster had a mean standardized score of roughly -0.5 for boredom proneness; the mean standardized amotivation score for students in the High Apathy cluster was approximately 2. This representation is intended to facilitate interpretation of between-cluster differences and similarities. Specific values of cluster means are displayed in tables.

Table 47

Comparison of Clusters by Grade Level

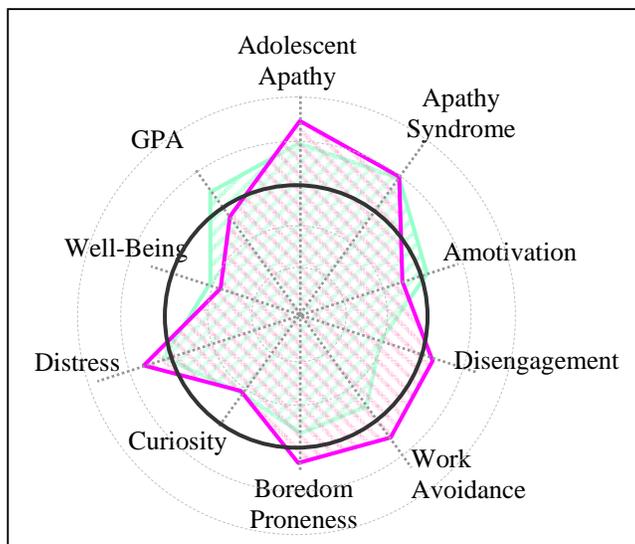
Cluster Number	Gr 8:	1 (7.1%)		2 (31.0%)		4 (31.0%)		3 (31.0%)	
	Gr 10:	2 (6.6%)		3 (43.4%)		4 (10.6%)		1 (37.7%)	
Cluster Label:		High Apathy		Moderate General Apathy		Moderate School Apathy		Low Apathy	
Variable	Grade	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Adolescent Apathy	8	2.66	0.43	2.53	0.31	2.19	0.34	1.87	0.28
	10	2.66	0.36	2.66	0.31	2.04	0.23	2.12	0.29
Apathy Syndrome	8	2.06	0.49	1.76	0.27	1.56	0.27	1.25	0.14
	10	2.07	0.32	1.76	0.24	1.39	0.15	1.30	0.16
Amotivation	8	3.64	0.73	1.49	0.59	1.42	0.41	1.08	0.17
	10	2.94	0.35	1.31	0.43	1.12	0.23	1.14	0.39
Disengagement	8	1.78	0.49	1.21	0.19	1.59	0.25	1.18	0.21
	10	1.58	0.32	1.42	0.28	1.58	0.26	1.19	0.17
Work Avoidance	8	4.09	0.84	2.27	0.76	2.64	0.64	1.47	0.44
	10	4.13	0.48	2.66	0.77	2.65	0.74	1.79	0.50

Figure 14

High Apathy Clusters: Grade 8 and Grade 10 Overlay

Note. Blue: Grade 8; Pink: Grade 10. Graphics based on standardized scores on all variables.

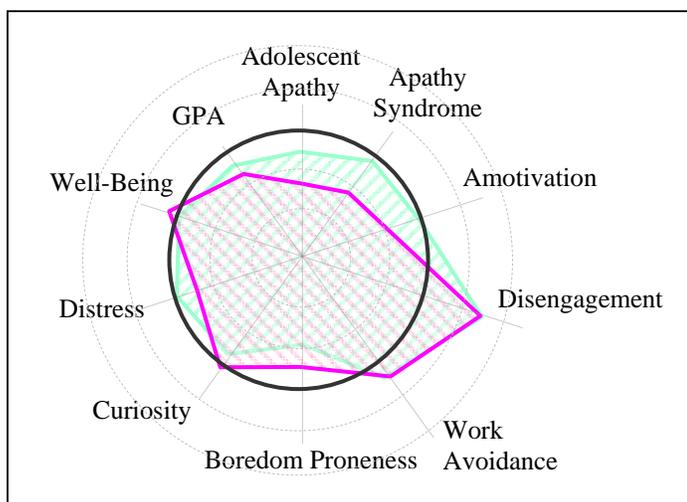
Figure 15

Moderate General Apathy Cluster: Grade 8 and Grade 10 Overlay

Note. Blue: Grade 8; Pink: Grade 10. Graphics based on standardized scores on all variables.

Figure 16

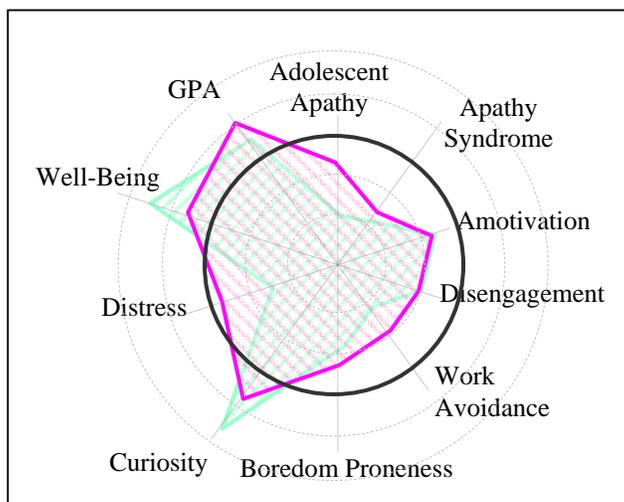
Moderate School-Related Apathy Cluster: Grade 8 and Grade 10 Overlay



Note. Blue: Grade 8; Pink: Grade 10. Graphics based on standardized scores on all variables.

Figure 17

Low Apathy Clusters: Grade 8 and Grade 10 Overlay



Note. Blue: Grade 8; Pink: Grade 10. Graphics based on standardized scores on all variables.

These clusters also varied by grade level with respect to proportions of students. While 8th graders were evenly sized, with 31% of participants each, over two-fifths (43.4%) of 10th graders were classified in Moderate General Apathy, compared to only 10.6% in Moderate School Apathy. This result lends some support to the hypothesis that a larger portion of 10th graders manifested more school-related apathy than did 8th graders. This interpretation is further supported by the observation that Moderate General Apathy 10th graders posted significantly higher levels of disengagement than did Moderate General Apathy 8th graders.

Data presented at the far right of Table 47 suggest that approximately one-third of students at each grade level formed a distinct cluster with the lowest levels on apathy variables. These data additionally suggest that Low Apathy 10th graders reflect more school-related apathy than their 8th grade counterparts. Tenth graders in the Low Apathy cluster possessed higher levels of adolescent apathy ($M = 2.11, SD = .23$) and work avoidance ($M = 1.85, SD = .52$) than did Low Apathy 8th graders ($M = 1.75, SD = .31; M = 1.49, SD = .48$). Further interpretations of these results are presented in Chapter 6, where quantitative and qualitative results are integrated.

Folk Conceptualizations

Folk conceptualizations were tested against grade level via chi-square analyses, as displayed in Tables 15 and 16. Apathetic nomination scores were independent of grade level. In contrast, significant differences in apathy category scores by grade level were detected, $\chi^2(3, N = 290) = 36.27, p = .000$. It appears that a greater proportion of 8th-grade students were classified as apathetic than were 10th graders. However, proportionately more 10th graders received mixed nominations. This is due in part to the fact that 10th

graders in the study were rated by more teachers than were 8th grade participants overall. Thus disagreement in nominations was more likely for 10th graders than for 8th graders.

Comparing Research-Based and Folk Conceptualizations

The present study afforded several opportunities for comparing grade-level differences in the relation between research-based and folk conceptualizations of school-related apathy. Tables 19 and 20 present data disaggregated by apathetic nomination scores on within-grade apathy means. Both effect sizes and significance levels of these tests inform grade-level comparisons. Data obtained in the present study suggest that within grade, both 8th and 10th graders who had received at least one apathetic nomination by teachers also manifested higher levels of apathy syndrome and lower GPAs than did students receiving no apathetic nominations. Only 8th grade students with apathetic nominations posted higher distress scores than students receiving no apathetic nominations, $t(137) = -2.22, p = .046, d = .41$.

On individual disengagement items, 10th graders with apathetic nominations were more likely to report going to class unprepared ($M = 1.84, SD = .79$) than were their peers without apathetic nominations, ($M = 1.47, SD = .52$), $t(130) = -3.20, p = .007, d = .55$. In contrast, there was not a significant difference between 8th-grade groups for this item. In terms of attending class without having completed the homework, significant differences were found within both 8th grade, $t(144) = -2.48, p = .011, d = .42$, and 10th grade, $t(138) = -4.42, p = .000, d = 0.82$. Nevertheless, the effect size for 10th graders was roughly twice that of 8th graders, suggesting that this problem is relatively more pronounced for the older students.

Parallel examinations were made for apathy category groups, shown in Tables 21 and 22. Analyses of variance yielded significant group mean differences for 8th graders', but not 10th graders', adolescent apathy, $F(3, 126) = 3.03, p = .03, \eta^2 = .07$, and apathy syndrome, $F(3, 126) = 5.85, p = .004, \eta^2 = .12$. On individual disengagement items, going to class unprepared was the only grade-level difference to emerge, with 10th graders varying significantly between apathy categories, $F(3, 130) = 6.47, p = .000, \eta^2 = .13$. Highly apathetic 10th-grade students were significantly more likely to report going to class unprepared than were their classmates.

As were conducted for the full sample, discriminant function analysis results were examined for each grade level to ascertain the success with which scores on the research-based apathy variables could predict teacher-based apathetic classifications. With data disaggregated by grade level, better classification resulted for apathetic nomination scores, with roughly three-quarters of participants correctly classified. However, as the data presented in Table 48 show, research-based conceptualizations identified fewer students as apathetic than did teacher nominations. Consistent with findings for the merged sample, this result suggests substantially more disagreement between research-based and folk identifications of apathetic students than of non-apathetic students.

Discriminant function analyses were less effective in predicting apathy category scores, with only 58% of 8th graders, and 68% of 10th graders accurately classified. As emerged in results from the full sample, research-based apathy scores were less effective in identifying apathetic students than they were for classifying those without apathy. These findings underscore the interpretation described earlier regarding sensitivity of

Table 48

*Grade-Level Discriminant Analysis Classifications: Apathetic Nomination by Apathy**Variables*

Teacher-Nominated Group Membership	Predicted Group Membership f (%)		Total
	0	≥ 1	
Grade 8			
0	78 (94.0)	5 (6.0)	83
≥ 1	26 (76.5)	8 (23.5)	34
Grade 10			
0	78 (89.7)	9 (10.3)	87
≥ 1	23 (67.6)	11 (32.4)	34

Note. All five apathy variables were entered as independent variables. For Grade 8, 73.5% of original grouped cases correctly classified. 73.6% of original grouped cases were correctly classified.

Table 49

*Grade-Level Discriminant Analysis Classifications: All Apathetic Category by Apathy**Variables*

		Predicted Group Membership <i>f</i> (%)				
Teacher-Nominated Group Membership	1	2	3	4	Total	
Grade 8						
1	13 (44.8)	3 (10.3)	13 (44.8)	0 (0.0)	29	
2	6 (22.2)	3 (11.1)	18 (66.7)	0 (0.0)	27	
3	3 (5.4)	1 (1.8)	52 (92.9)	0 (0.0)	56	
4	0 (0.0)	0 (0.0)	5 (100.0)	0 (0.0)	5	
Grade 10						
1	3 (27.3)	0 (0.0)	7 (63.6)	1 (9.1)	11	
2	0 (0.0)	0 (0.0)	6 (85.7)	1 (14.3)	7	
3	1 (1.3)	0 (0.0)	74 (92.5)	5 (6.3)	80	
4	1 (4.3)	0 (0.0)	17 (73.9)	5 (21.7)	23	

Note. All five apathy variables were entered as independent variables. Correct classifications of original grouped cases were made for 58.1% and 67.8% of 8th and 10th graders, respectively.

research-based apathy operationalizations to students who, from teachers' perspectives, lack motivation for school (see Table 49).

In addition, little success obtained in predicting which students would receive mixed reviews from teachers. This is potentially due to the domain-specific character of school-related apathy, which the research-based measures were not configured to detect. The content-specific nature of teachers' roles would have reflected students' domain-specific apathy as manifested in specific subject-matter classes. The data presented in Chapter 5 support this interpretation.

Data from cluster analyses at each grade level were also compared against apathetic nomination and apathy category scores, as shown in Tables 42 and 45. For 8th graders, no significant differences were detected in either frequency distribution. In other words, these data did not offer evidence that apathetic nomination or apathy category scores are dependent with respect to cluster membership. Although non-significant results do not offer support for specific hypotheses, this finding suggests that research-based and folk perceptions of student apathy do differ. If on the other hand they were similar, then cluster nomination and apathetic nominations should not be independent.

In contrast, the significant results obtained for 10th graders indicates their cluster membership was dependent with respect to both forms of teacher-derived apathy scores. Thus, in contrast to 8th graders, evidence was observed that research-based and folk perceptions of school-related apathy in students are related.

The data presented in this section offer several insights into potential differences between research-based and folk conceptualizations of school-related apathy. First, the finding that 8th-grade—but not 10th-grade—students receiving apathetic nominations

differed significantly on levels of apathy syndrome, distress, and GPA from those not receiving apathetic nominations suggests that 8th-grade teachers may have been more in tune with student levels of apathy. All 8th grade participants came from small schools and in many cases teachers had known the students since they were in kindergarten.

Another possibility is that 8th-grade teachers' conceptualizations of school-related apathy bore closer resemblance to the operationalizations of these constructs than did those of 10th-grade teachers. With respect to the GPA differences, middle school data reflected substantial negative skew, with some schools reporting all "A" averages for all students. Eighth-grade students with low GPAs were rare, and thus perhaps stood out clearly as candidates for classification as apathetic toward school.

In contrast, 10th-grade teachers appeared more sensitive than 8th-grade teachers to aspects of disengagement, specifically to going to class unprepared and without having completed homework. This finding suggests that 10th grade teachers may have been more in tune with markers of achievement than were 8th-grade teachers. Cast in alternative terms, teachers of these grade levels may hold different priorities for students' motivation for school.

Prevalence of School-Related Apathy

Data from each grade level were examined to address the hypothesis of the present study that apathy would be more pronounced and reflect increased variance in the later adolescent years. First, proportions of students classified as apathetic by teacher nominations and by research-based variables were reviewed. Second, within-grade mean levels of apathy variables were compared to their possible score ranges. Third, t-tests were performed to detect between-grade differences in mean levels of apathy variables.

Proportions of students classified in cluster analyses as highly to moderately apathetic were examined. These data are presented in Tables 41, 44, and 47. Cluster data indicate similar proportions of 8th and 10th graders manifest strong school-related apathy. However, proportions for other groups varied between grades, with a higher percentage (43%) of 10th graders in the moderate general apathy group, in contrast to 31% of 8th graders. More 8th graders fell into a moderate school apathy cluster than did 10th graders, and posted higher mean levels of apathy syndrome and amotivation. Similar proportions of students fell into the low apathy clusters for grades 8 (31%) and 10 (38%). However, 10th graders in this cluster reported higher adolescent apathy and work avoidance than did 8th graders classified by cluster analyses as low on school-related apathy. Consistent with hypotheses, these data suggest that 10th graders with the fewest signs of school-related apathy nevertheless manifest higher adolescent apathy and work avoidance than do similarly classified 8th graders.

Scores on all apathy variables were tested against the midpoint and lowest point of their response scales. Results indicated that mean levels of apathy reported by students in each grade were significantly less than the scale midpoint and significantly higher than the lowest score possible. All tests yielded $p = .000$. For both 8th- and 10th-grade participants, mean levels of each apathy variable were significantly greater than the lowest point on the scale, at $p = .000$. These results are consistent with those reported for the full sample. In between-grade comparisons of average levels of apathy, only adolescent apathy scores were observed to differ significantly, with 8th graders ($M = 2.21$, $SD = .43$) reporting lower adolescent apathy than did 10th graders ($M = 2.37$, $SD = .41$), $t(270) = -3.14$, $p = .002$, $d = .38$.

In sum, data analyzed in the present study indicate that while overall differences in mean levels of school-related apathy did not distinguish 8th graders from 10th graders, grade-level variations in *patterns* of school-related apathy were indeed present.

Associated Individual and Group Differences

The final set of quantitative between-grade analyses targeted scores and patterns in the individual difference variables assessed in the study. A number of statistical methods were applied to respond to this aspect of the third research question.

GPA's were higher for middle school students, reflective of what appeared to be a tendency toward grade inflation—at some participating middle schools, nearly all students had “A” averages. At the high school level, average GPA was more realistic, though still strong, with two-thirds of students having earned GPA's between 2.98 and 4.0 during their freshman year.

No significant differences in mean levels were detected between grades for any of the five individual difference composites (see Table 7). Comparisons were also made to the minimum and maximum scores for each individual difference variable except GPA. For both grades, mean levels differed significantly only on well-being, with scores for both 8th graders, $t(154) = 2.94, p = .004$, and 10th graders, $t(131) = .70, p = .487$, falling slightly but significantly above the scale midpoint. All mean scores were significantly higher than the lowest scale point, and significantly lower than the scale's highest point, at $p = .000$.

In terms of gender, both 8th and 10th graders posted differences for distress scores, with males reporting less distress than females, as shown in Tables 11 and 12. Only males in 10th grade reported significantly higher well-being than did females, $t(130) =$

3.60, $p = .001$, $d = .62$. Thus, gender differences detected in the full sample also held within grades.

Intercorrelations between apathy and individual difference variables presented in Tables 13 and 14 were also examined for grade-level differences. Small, medium, and large effect sizes were defined by Cohen (1992) as .10, .30, and .50, respectively. Effect sizes observed for between grade differences in correlation coefficients in these analyses ranged from .00 to .38. Although the present study's sample size was not sufficiently large to detect significance of these differences, these results suggest the presence of several grade-level differences.

Specifically, within individual differences, data indicated that boredom proneness was more strongly related to both distress and well-being for 8th graders ($r = .62, -.58$) than for 10th graders ($r = .33, -.30$), $q = .38$, and that both distress and well-being were significantly related to GPA for 8th graders, but not for 10th graders. Regarding relations between apathy and individual differences, associations between amotivation and distress and between amotivation and well-being were stronger for 8th graders than for 10th graders. It also appeared that 10th graders' boredom proneness may have been more strongly related to apathy syndrome than it was for 8th graders.

Hierarchical multiple regression outcomes were explored by grade level to predict each individual difference variable. The two study-created apathy variables were entered as predictors in the first step, and the five research-based apathy variables were entered in step 2. Normalizing transformations were applied to non-normal variables prior to analyses. As aforementioned, since amotivation was strongly right-skewed, regression was run with and without this variable for comparison purposes. However, results using

the amotivation variable must be interpreted with caution. Data are displayed in Tables 50 through 53.

As aforementioned, the purpose in conducting multiple regression in steps with the hybrid factors and then the original apathy variables as independent variables was to examine the predictive efficiency of the former in comparison with the latter. If the hybrid factors were able to predict individual differences comparably to the full set of five apathy variables, a case could be made for greater parsimony. Changes in R^2 following the first step of each multiple regression suggest that the new apathy variables were more effective predictors of curiosity and GPA for 10th graders than for 8th graders. More variance on boredom proneness, distress, and well-being, however, was explained by 8th-grade scores on the new apathy variables than by 10th-grade scores. Final effect sizes also differed somewhat between grades, with distress and well-being substantially better explained by all variables for 8th graders than for 10th graders. For curiosity, final effect size for 10th graders appears to be higher than for 8th graders.

Within each grade level, tests were performed to detect significant differences in mean individual differences scores between apathetic nomination and between apathy category groups. As presented in Table 19, grade 10 but not grade 8 reported significant differences in boredom proneness between apathetic nomination groups, whereas only grade 8 posted significant differences in distress levels between apathetic nomination groups. GPA was significantly lower for 8th graders receiving at least one apathetic nomination. This may have been due to the distribution of 8th-grade GPA, which was substantially left-skewed. Few 8th-grade students posted low-GPAs, making it more likely for low GPA to serve as a marker of apathy for teachers. With respect to apathy

category, curiosity scores for grade 8 but not for grade 10 varied significantly in omnibus tests (see Table 23).

Finally, cluster profiles were examined with respect to grade-level for individual differences. Table 54 presents grade-level comparisons of cluster results with respect to individual differences. In the Low Apathy Clusters, eighth graders reported lower distress and higher well-being than did Low Apathy 10th graders. Data also indicated patterns distinguishing clusters. Boredom proneness distinguished the High Apathy from Low Apathy groups for both grades and additionally from Moderate School Apathy students for 8th graders. At the 8th-grade level, Low Apathy students had higher curiosity scores than students in the three other groups.

Distress and well-being varied by cluster membership only for 8th-grade participants, with both characteristics moving toward healthier profiles across the span from high to low apathy clusters. The mean differences in GPA across clusters for 8th graders bear further research. Interestingly, Low Apathy 10th graders posted GPAs nearly equal to the mean.

Table 50

Grade 8 Multiple Regressions of Individual Difference Variables on All Apathy Variables

Predictor	Boredom Proneness		Curiosity		Distress [†]		Well-Being [†]		GPA [†]	
	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1		.316***		.205***		.228***		.250***		.062*
f^2		.46		.26		.30		.33		.07
PLI [†]	-.250**		.392***		-.208*		.190*		-.056	
SI [†]	.412***		-.113		.353***		-.391***		-.267**	
Step 2		.038		.034		.044		.093**		.103*
PLI [†]	-.148		.385**		-.339*		.358**		-.139	
SI [†]	-.067		.496		.175		-.170		-.061	
AAI	.168		-.093		.067		-.044		-.117	
AES [†]	.028		.086		-.209		.250		-.102	
AMOT	.100		-.314*		.175		-.408**		-.120	
DISEN [†]	.151		-.053		.214		-.191*		-.324**	
WAVD [†]	.305		-.373		-.043		.163		.119	
Total		.354***		.239***		.272***		.342***		.166**
f^2		.55		.31		.37		.52		.20

Note. $n=118$. Effect sizes are f^2 ; Cohen (1992) defines .02, .15, and .25 as small, medium, and large effect sizes, respectively.

[†] Normalizing transformations were applied to these variables prior to performing multiple regression analyses.

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

Table 51

Grade 8 Multiple Regressions of Individual Difference Variables on All Apathy Variables except Amotivation

Predictor	Boredom Proneness		Curiosity		Distress [†]		Well-Being [†]		GPA [†]	
	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1		.316***		.205***		.228***		.250***		.062*
PLI [†]	-.250**		.392***		-.208*		.190*		-.056	
SI [†]	.412***		.113		.353***		-.391***		-.267**	
f^2		.46		.26		.30		.33		.07
Step 2		.035		.008		.036		.048		.10**
PLI [†]	-.123		.308*		-.296*		.259		-.168	
SI [†]	.078		.043		.427		-.758***		-.235	
AAI	-.166		-.088		.065		-.039		-.115	
AES [†]	-.070		-.046		-.136		.709		-.152	
DISEN [†]	-.131		.006		.182		-.116		-.302**	
WAVD [†]	-.230		-.141		-.172		.465*		.208	
Total		.351***		.212***		.264***		.298***		.162**
f^2		.54		.27		.36		.42		.19

Note. $n=118$. Effect sizes are f^2 ; Cohen (1992) defines .02, .15, and .25 as small, medium, and large effect sizes, respectively.

[†] Normalizing transformations were applied to these variables prior to performing multiple regression analyses.

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

Table 52

Grade 10 Multiple Regressions of Individual Difference Variables on All Apathy Variables

Predictor	Boredom Proneness		Curiosity		Distress [†]		Well-Being [†]		GPA [†]	
	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1		.346***		.225***		.114**		.126***		.117***
PLI [†]	-.394***		.412***		-.196		.257		.028	
SI [†]	.287**		-.109		.196		-.150		-.327**	
f^2		.53		.30		.13		.14		.13
Step 2		.035		.071		.019		.031		.061
PLI [†]	-.304		.105		-.049		.056		-.065	
SI [†]	.025		-.350		.285		.157		.047	
AAI	.168		-.190		.154		-.205		-.199	
AES [†]	-.039		-.271		.096		-.129		.001	
AMOT [†]	-.035		.294		-.095		-.150		-.167	
DISEN [†]	-.019		.125		.024		-.009		-.267*	
WAVD [†]	.315		.058		-.092		-.127		-.082	
Total		.382***		.296***		.133*		.157**		.178**
f^2		.62		.42		.15		.19		.22

Note. $n=114$. Standardized beta weights at the last step are shown.

[†] Normalizing transformations were applied to these variables prior to performing multiple regression analyses.

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

Table 53

Grade 10 Multiple Regressions of Individual Difference Variables on All Apathy Variables except Amotivation

Predictor	Boredom Proneness		Curiosity		Distress [†]		Well-Being [†]		GPA [†]	
	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1		.346***		.225***		.114***		.126***		.117***
PLI [†]	-.394***		.412***		-.196		.257*		.028	
SI [†]	.287**		-.109		.196		-.150		-.327**	
f^2		.53		.30		.13		.14		.13
Step 2		.035		.047		.017		.025		.053
PLI [†]	-.311		.132		-.059		.041		-.080	
SI [†]	-.036		.173		.116		-.111		-.242	
AAI	.171		-.225*		.165		-.187		-.179	
AES [†]	-.049		-.207		.073		-.165		-.046	
DISEN [†]	-.011		.056		.046		.026		-.227*	
WAVD [†]	.349		-.240		.005		.026		.089	
Total		.381***		.273***		.131*		.151**		.170**
f^2		.62		.38		.15		.18		.21

Note. $n=114$. Standardized beta weights at the last step are shown.

[†] Normalizing transformations were applied to these variables prior to performing multiple regression analyses.

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

Table 54

Individual Differences Comparisons of Clusters by Grade Level

Cluster Number		Gr 8:		1 (7.1%)		2 (31.0%)		4 (31.0%)		3 (31.0%)	
Cluster Label		Gr 10:		2 (6.6%)		3 (43.4%)		4 (10.6%)		1 (37.7%)	
Cluster Label		High Apathy		Moderate General Apathy		Moderate School Apathy		Low Apathy			
Variable	Grade	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Boredom Proneness	8	0.56	0.15	0.36	0.16	0.36	0.15	0.27	0.13		
	10	0.44	0.15	0.39	0.15	0.30	0.09	0.25	0.14		
Curiosity	8	3.79	0.71	4.48	0.79	4.71	0.83	5.33	1.12		
	10	4.55	0.98	4.40	0.76	4.90	0.79	5.00	0.77		
Distress	8	2.92	0.91	2.42	0.66	2.29	0.75	1.74	0.52		
	10	2.41	0.76	2.57	0.66	2.14	0.54	2.13	0.70		
Well-Being	8	2.26	0.93	2.86	0.74	3.14	0.69	3.61	0.40		
	10	2.73	0.50	2.76	0.71	3.26	0.49	3.28	0.74		
GPA [†]	8	-0.69	0.89	0.31	1.01	-0.09	1.00	0.16	0.92		
	10	-1.33	1.50	-0.04	1.06	-0.07	0.42	0.35	0.82		

Note. [†]GPA data are based on within-grade standardized scores.

CHAPTER V

QUALITATIVE RESULTS

In keeping with a “diversity of views” rationale, interviews were conducted with teachers and students to identify a range of folk perspectives associated with the first and third research questions of the present study. This approach afforded documentation of participants’ insights into school-related apathy in order to both validate and enhance existing research-based conceptualizations (Bryman, 2006).

Specifically, the interview data were consulted to reveal how teachers and students conceptualize school-related apathy, and to what extent those “folk constructs” are consistent with research-based conceptualizations. Responses were also examined for perceptions of the prevalence of school-related apathy in students and for agreement between teacher and student participants regarding prevalence estimates. As detailed in the following section, the process adopted for extracting themes yielded a set of codes which were assigned to responses and subsequently aggregated at the participant level. Grouping codes at the participant unit of analysis allowed code distributions to be compared by grade, gender, and apathy category to ascertain whether participants’ conceptualizations of school-related apathy differed with respect to these individual differences.

Interview Procedures

A total of 96 interviews of teachers (38) and students (58) were conducted by the researcher at participants’ schools. All teachers who agreed to participate in the study were interviewed, resulting in data from 23 8th-grade teachers and 15 10th-grade teachers. As outlined in Chapter 3, a random stratified sample of student interviewees was drawn

based on apathy category and grade level. Exactly 50% of students came from each grade level; this process also ensured comparable representation across teacher-nominated levels of students' apathy toward school. The selection process for student interviewees did not include gender in order to allow for naturally-occurring gender representation within the apathy categories. Of the 58 students interviewed, 21 (36%) were male and 37 (64%) were female.

During interviews both the researcher and interviewee were blind to classifications assigned in the present study regarding apathy category and apathetic nomination. Student interviews were conducted during the school day and took place out of earshot of others so that students would feel free to express their views. Teacher interviews were conducted in private either before or after school, or during the teacher's free period. Each interview was digitally audio-recorded and subsequently transcribed by the researcher. Verbatim statements by the researcher and participant were recorded in the transcripts without indication of tone of voice. The only non-verbal information recorded were pauses greater than 4 seconds and exclamation points to denote marked enthusiasm or surprise.

Teacher interviews lasted an average of 13 minutes and 43 seconds; average word count per interview, including researcher questions, was 1,860. The shortest interview lasted 4 minutes 36 seconds; the longest took 20 minutes and 45 seconds. Student interviews lasted 7 minutes and 45 seconds on average, and included an average of 1,250 total words from student and researcher. The shortest student interview lasted 5 minutes and 7 seconds; the longest was 12 minutes and 44 seconds. The smaller variance on

student interview length was due to tighter scheduling constraints, as students were pulled from class to be interviewed.

Transcript Analysis Procedures

A coding process was employed for extracting and condensing a set of themes germane to the goals of the present study (Miles & Huberman, 1994). During transcript analysis, both the researcher and second rater were blind to grade level and, in the case of students, apathetic category classification. Following the procedures described in this section, teacher transcripts were analyzed first, followed by student transcripts. Codes generated for student transcripts were aligned when possible to teacher codes, with careful attention paid to avoid artificially imposing interpretations solely for the sake of alignment. As described below, the identification of 17 new student codes for students and the non-use of 22 teacher codes suggest that this process successfully allowed for unique insights to emerge from student transcripts.

Teacher transcripts were analyzed first. In the first phase of analysis the researcher read through all teacher transcripts multiple times to become familiar with the responses. Based on this initial reading, a preliminary set of codes was generated to represent key emergent themes. In the second phase, the researcher reread the transcripts to extend the set of themes and assign relevant codes to each response. Each response evidencing an existing code was marked accordingly; no minimum or maximum was imposed on the number of codes that could be assigned to each response. When a response evidenced a theme not yet on the list, a new code was created and used to mark relevant responses. This phase of analysis yielded a set of 129 codes. In the third phase, the researcher reviewed the set of codes for redundancy and clarity and retained 74 codes,

grouped into 11 categories. The entire set of teacher responses was then reviewed individually and recoded using the condensed set of codes.

A second rater with a doctorate in education applied the condensed set of codes to 25% of the teacher transcripts. Eighty percent reliability was obtained, based on agreement at the participant level. Subsequently, in order to achieve maximum reliability for code assignment, the researcher and the second rater worked collaboratively to review the full set of transcripts, adding or removing codes at the participant level based on consensus. This process included a review of all responses associated with each code to improve coherence of statements assigned to each code. The final set of codes and code assignments for each participant represents 100% agreement between the two raters.

Student transcripts were reviewed in similar fashion. A set of 70 final codes was generated and applied at the response level. All responses assigned to each code were then reviewed for collective coherence and refined as necessary. An interrater reliability of 85% was obtained based on a random sample of 25% of transcripts. All responses and codes were then reviewed collaboratively by the researcher and second rater to attain 100% agreement at the participant level.

The final phase of analysis consisted of synthesizing the perspectives captured by the interviews and coding procedure into a form suitable for presentation of results. Codes were grouped into dominant themes according to the research questions under consideration. First, codes pertaining to teacher and student conceptualizations of school-related apathy were grouped, as were codes related to the prevalence and operationalization of school-related apathy. Second, individual and group differences with respect to gender, grade level, and apathy category were examined via between-

group code frequencies. Taken together, the multiple steps of analysis described herein allowed for iterative refinement and tightening of core themes.

The following sections present the dominant themes illustrated by several verbatim quotations. To ensure that statements presented for each theme represent the full sample, no more than two quotations were included from any participant. Participants' study identification numbers appear in the table alongside each quotation, with a "t-" prefix indicating teachers and an "s-" denoting students. This information is provided to show that comments were drawn from many participants and thus represent shared or common perspectives. Interviewer questions, shown in italics, are included to contextualize the meaning of participants' comments, as well as to exhibit the interview style used to probe participants' viewpoints. For each dominant theme, quotations are displayed from approximately 20% of participants who gave evidence of the theme.

Folk Conceptualizations of School-Related Apathy

A broad range of conceptualizations of school-related apathy and lack of motivation were captured in interviews with teachers and students. Analysis of relevant codes yielded twelve dominant conceptual threads, each of which is briefly described below and compared to the research-based conceptualizations assessed in the present study. In addition, congruence and divergence between teacher and student perspectives are identified. A table of exemplary quotations from teachers and students follows the description of each thread.

Making the Grade

Nearly all participants spoke about motivation for school in terms of students' motivation to get good grades. Both teacher and student responses evidenced a strong

focus on achievement and a conceptualization of school-related motivation as motivation, or lack thereof, to maintain good grades (see Table 55). Although this theme arguably deals more with students' motivation than with their lack of motivation or school-related apathy, there was evidence to suggest that this conceptualization actually impedes student motivation to engage with the content itself. This thread was thus retained in light of this evidence, as well as its sheer prevalence across participants.

Of interest is evidence for a distinction between competence and earning good grades. Data from multiple interviews suggest that students were more concerned with earning good grades as a critical step toward later success than they were with gaining a sense of competence or appearing competent. This area warrants further investigation, as it may represent the “next generation” of competence-based conceptualizations of student motivation. This issue is elaborated in the discussion in Chapter 6.

Table 55

Dominant Theme Exemplar Data: Making the Grade

Study ID	Data
t-111	<i>And do you think that level of caring [about the content] influences the motivation?</i> Caring I think to get the grade, yeah. Not so much their reaching for this far-reaching knowledge. Not yet, not at the 8th grade level. I don't think so.
t-121	[I]f you didn't grade them, they wouldn't... motivation probably might drop. Like if they weren't seeing some kind of a result from the work that they're doing. Maybe if it wasn't a letter grade, maybe if there was another grading scheme of some sort, but I think the letter grade kind of drives them.

Table 55, *Continued*

Study ID	Data
t-140	I think it would be better if our kids felt more competent than they did caring about the grade, you know what I'm saying. I feel like that is a big issue. And I'm guilty of it! I'm getting my masters' and I still want the A, you know!
t-143	If you're talking about honors kids, it's all about grades, for the most part, almost to the detriment of... "What are you learning?" "I don't know but I have an A in it!" So the honors kids are very much about grades and achieving.
t-147	[W]hen you introduce a new topic, sometimes right away the impulse is to ask, "well, what does this count as?" instead of saying "oh, you have a new software, we've got movie maker, we're going to teach you how to use this new software instead of always doing PPT presentations" The kids will immediately say, "well, is this going to count as 2 test grades, 1 test grade, is it a quiz" and then that way in their minds they'll of summarize, well how much effort should I put into this? And so sometimes that takes away from it. Sometimes the kids will ask me, if we do something a little "extra," they'll ask, "Well is this going to be on the test?" So that almost sets a tone, like, you know, if I answer no does that mean you're going to be less engaged with it?
t-154	<i>And how about kids caring not so much about grades but about the content. Do you find that kids care about the content?</i> Not that much. More about the grades. I think generally, I mean, I think there are a few that are just very interested in the topics and they're just generally interested but that's a very small percentage.
s-170	<i>When you say not motivating what do you mean by that?</i> Like, I don't really want to do good in that class or I don't really care about my grades in that class. But I care about my grade in every class.
s-222	<i>Now, how about in school, are there some things that really motivate you?</i> Um.... I try as best I can to keep my grades up. <i>So you're motivated to get good grades?</i> Yeah.
s-250	<i>How important is it for you to do well in school?</i> I found it really important because I grew up in a household where you strive to do your best, you strive to do well. Like, my mom was a straight A student,. She graduated like top 10 in her college class or something so it's always been a thing around my house to do well with your grades.

Table 55, *Continued*

Study ID	Data
s-266	<p><i>Are there times when you can do well but you haven't really understood?</i> Yeah. <i>So in that case would you consider yourself motivated?</i> Yeah. <i>How about when you really understand it but you make some silly mistakes?</i> Yeah. <i>So that happens too?</i> Yeah. <i>And is that motivating or not?</i> Not motivating.</p>
s-313	<p><i>So then, let's say they have a project and they give you the reasons, does it convince you enough to be motivated or not?</i> Um, sometimes, if they're doing it just to have a project for the quarter, then that doesn't really like motivate me. <i>I see. What kinds of reasons would motivate you?</i> Like, if it is going to impact my grade a lot then I'll try to do a good job on it, or if I want to bring up my grade, I'll work really hard on it and everything.</p>
s-340	<p>My mom really likes me to be on first honors so I find it really motivating that I can get my grades up to that and this year I reached first honors for the first time so it was like motivating to see that I can push myself and I almost made President's list so I'm like capable of doing it.</p>
s-457	<p><i>If I asked your teachers, would they say you're motivated in school or not?</i> I think they would. I try to excel and do my best in my schoolwork.</p>

Ticket to Ride

Related to the emphasis on grades was a preoccupation on the students' part with future consequences, specifically as access to quality institutions of higher education, to high-salary jobs, or, for 8th graders, to local private high schools. It appeared that many students conceptualized their motivation or lack of motivation for school in terms of commodity acquisition, rather than as motivation toward a process that develops their mental capacities (see Table 56). To some extent, this conceptualization reflected the

research-based construct of extrinsic motivation as defined by self-determination theory (Deci & Ryan, 1985b; Ryan & Deci, 2000a). Both teachers and students evidenced this conceptualization of a lack of motivation for school. However, students tended to be more explicit and to raise this issue more frequently. Student comments in this regard also reflect the operationalization of adolescent apathy. The AAI includes items pertaining to career and college goals, such as “I know what I want to be when I grow up.”

Table 56

Dominant Theme Exemplar Data: Ticket to Ride

Study ID	Data
t-102	It's very difficult to get them to see that, you know, if they're able to get B's and A's that just getting C's and D's is not a good thing. It doesn't look good on your record and as far as they're concerned, "I can go to a high school that has to take me, all my friends go there, so why do I want to bother. I'll pick it up next year when I have to play sports and my grades really matter." There's not much to motivate them with, either, once you get to the 8 th grade. They know that the high schools really look at their 7 th grade first before they look at their 8 th grade year. So some of them are motivated in their 7 th grade year to do very well, and then in 8 th grade they just kind of relax, they do nothing and there's really nothing besides saying, "Well you won't graduate." They'll say, "Yeah but all I need to graduate is a C so why am I going to stress myself this year?"
t-122	Generally, when I think of the groups I've had here, they're very concerned about where they're headed, so they put much more effort into the things they do so that they can have a successful, let's say, school evaluation of them and then, usually, too, that they try to get the high grades so that they can be accepted in the high schools that they want to go to.
t-123	The highly motivated ones who want to go to Harvard or some rich school, they'll be there. They'll come after school and they'll make sure everything's perfect.
s-129	Yes it is because if I do good in school then I might be able to go somewhere in my life because my parents didn't get to go to college so I want to fulfill that and go to college just for them. So having good grades is very important.

Table 56, *Continued*

Study ID	Data
s-155	<p><i>In our country, you're required to go to school until you're 16. What do you think about that?</i></p> <p>Um, yeah, I'd say so.</p> <p><i>Why?</i></p> <p>Because I'd like to get a good job and a good career.</p> <p><i>So that's a good reason for being in school, but it comes in the future, right?</i></p> <p><i>Are there some good reasons for being in school now?</i></p> <p>Yes, cause it depends on which high school you can go to.</p> <p><i>Ok, how about even closer to now?</i></p> <p>Um, college.</p>
s-188	<p>Because it makes me want to, like, do good and do even better and get into the high school and college I want, get a good job that I want and whatnot, so</p>
s-251	<p><i>What are your reasons for learning?</i></p> <p>Cause I want to get a good education and do better and set my life up so I can get a good job and grow up and be on my own and be independent.</p>
s-332	<p>Just the fact that this is preparing me for college and getting a better job it's motivation enough to do well so that I can do well in the future.</p>
s-404	<p><i>Now, how about in school, are there some things that really motivate you?</i></p> <p>Ah, sometimes, but.</p> <p><i>Not so much generally?</i></p> <p>Naw</p> <p><i>It's ok, be honest. I want to know what you're really thinking!</i></p> <p>I mean, it's only motivating to get to college and stuff, you know.</p> <p><i>So, for stuff that's later.</i></p> <p>Yeah.</p> <p><i>How important is it for you to do well in school?</i></p> <p>It used to be like really important but I don't know it's like I'm starting to lose my motivation.</p> <p><i>Why do you think that is?</i></p> <p>I don't know.</p> <p><i>Do you see the reasons for coming to school?</i></p> <p>Yeah.</p> <p><i>What are they?</i></p> <p>Just cause you need an education if you want to get somewhere but I'm like losing my motivation.</p>

Caring Less

Many teacher participants spoke of students' lack of motivation in terms of not caring about school. Some described a profound lack of caring about school on the part of students, and several expressed frustration over an apparent inability to move students to care about engaging in class and completing homework. Although traces of this theme were present in student responses, lack of caring about school did not emerge explicitly as a dominant issue (see Table 57).

This theme echoes the research-based constructs of adolescent apathy and amotivation. The operationalization of adolescent apathy includes an item regarding caring about skipping class or a day of school (Form B, item 10). One of the five items used to assess participants' amotivation for school asked students the extent to which they agreed that, "I can't see why I go to school and frankly, I couldn't care less" (Form D, item 4). Nevertheless, the strong statements from several teachers regarding students' lack of caring for school suggest that this is an area worthy of further attention. As in the case of apathy, it may be that existing theories and constructs in research literature treat this issue, such as expectancy-value theory (Eccles et al., 1998, Wigfield & Eccles, 2000). Further discussion of this issue is presented in Chapter 6.

Table 57

Dominant Theme Exemplar Data: Caring Less

Study ID	Data
t-104	They don't care about school. They have no interest in school. Even special events that go on, a lot of them won't come; parents don't want to come, parents don't want to be bothered to take the children, there's no involvement.

Table 57, *Continued*

Study ID	Data
t-107	I think the truth behind it is that students don't care and they know they have the system beat. I think the current thought in educational thought in general is very flawed. It assumes that students love learning and that students—the only reason they don't believe in themselves—and that's not true—I've seen some of the most confident students be the most apathetic because they just don't care, they're more focused on social life especially in 8th grade.
t-109	I feel like they don't care. Those who struggle I'm aware of and I, they, how should I say this? They still get—I don't modify anything for them. They come for extra help and there are other routes that we go with those who struggle. Those that I know are capable and have the ability, that just don't do it, they just don't care. There's a big difference.
t-120	I have a few that don't care. They don't care one way or another. They're just here because they have to be. In other schools that I've been in in public systems, the problem is much greater in that sense. When I came here, the first year I was here, I didn't see that at all. The 8th grade class was very motivated, they were a great class. This is a great class, too, don't get me wrong, but they just don't have the motivation and that's where I think the problem is, but in other schools that I've taught in it was much worse.
t-133	The ones that care about the content are highly motivated.
t-152	[E]specially the veterans, they'll say the biggest difference is [students] don't care anymore and they really don't care about how the presentation is, they don't care about handing in projects, handing in work.
s-143	Sometimes I'm like, "Oh, I don't want to do this. I don't even care about it."
s-208	<i>What if there were no grades, but you worked really hard and you realized that you got it, you understood it really well. Would that be satisfying for you or would you prefer just not to have done it anyway?</i> I could care less.
s-292	<i>What does [not motivating] mean for you?</i> Just, not really caring about how you do in some particular area, just like no drive to, doesn't really, you don't really have any care of what you, of what happens. (...) [D]uring school I just, it doesn't seem like I care a lot about what I do. Like, I don't put in much effort.

“I Just Don’t Get It”

A theme that emerged primarily from students was the link between motivation and access to the meaning of the content itself. Data from several students suggest that a key to their motivation is the extent to which they understand the content. As aforementioned, rather than expressing motivation for competence per se, students in the present study tended to focus their conceptualization of a lack of motivation for school in terms of whether they could understand the subject matter. Neither interview data gathered from teachers nor items used to tap the research-based conceptualizations in the present study included this perspective explicitly.

Table 58

Dominant Theme Exemplar Data: “I Just Don’t Get It”

Study ID	Data
s-103	<p><i>What makes a book interesting?</i> It’s catchy, you kind of get into it and you catch on right away. Sometimes a book, like I read over the summer a book for school and I just didn’t understand it, it just didn’t click.</p>
s-155	<p><i>And how about a class that you find not motivating. What are some words you could use to describe that class?</i> Um, I could say sometimes boring. <i>When is a class boring for you?</i> When I really don’t understand anything and it’s everything, like, confusing so I don’t, like, it’s just boring because I don’t really get it.</p>
s-204	<p>Like if you don’t do it you won’t understand the subject let’s say so much and if you practice doing it you’ll understand it more, like, know how to do it.</p>
s-249	<p><i>Are there times when you suddenly really understand something in math?</i> Yeah, and then it’s exciting. I’m like, “yes!” I finally get it. <i>Is it because of the grade or because you get it?</i> Because I get it. <i>What’s that like?</i> It’s uplifting, you get something and you’re just like, wow, work paid off.</p>

Table 57, *Continued*

Study ID	Data
s-278	Well, math, I'm not very good at math. And I don't know, it's just harder, harder to learn about that it is history. And French, I'm not very good at French. It's very hard for me to learn a new language because I don't really understand all the rules. (...) I was motivated for French and then everything started getting harder and I don't think she explains stuff as much as she used to and I get lost sometimes and I think I lose motivation because of that.
s-327	No, some people just look at math and think, "Oh letters and numbers, oh, where did this sign come from, I don't know what this means," and they just shrug it off.
s-403	<i>In our country, you're required to go to school until you're 16. What do you think about that?</i> For some people it's their choice and they need to stay in school or if you need to like come out of school, like, if you need to help your parents or something it would be different. <i>What would make school more motivating for students?</i> If they understood it more, like.

Confused and Overwhelmed

Being overwhelmed by everything on their plates and the pressures to achieve were identified by some teachers regarding students' lack of motivation for school. Some referred to learned helplessness by name as a challenge teachers face. Others spoke of the many distractions that lure students from their studies. These distractions included technology, extracurricular activities, and families that do not prioritize education. Some teachers saw these distractions as compounded by a lack of study skills. Students were less likely to speak of being overwhelmed, although some referred to school responsibilities as confusing, and several indicated feeling stressed or anxious to do well in school.

This folk perspective on school-related apathy resonates with multiple aspects of research-based conceptualizations. For instance, the measure for adolescent apathy asks

respondents whether they consider themselves smart (Form B, item 14); “I have motivation” is among the items tapping apathy syndrome (form C, item 18). In particular, work avoidance is arguably close to the teacher and student statements gathered in this thread. However, learned helplessness may be an antecedent to, rather than synonymous with, the manifestations of work avoidance tapped by the five items administered in the present study (e.g., “I wish I didn’t have to do schoolwork;” “I want to get out of doing schoolwork;” and “I just want to do enough schoolwork to get by”).

Table 59

Dominant Theme Exemplar Data: Confused and Overwhelmed

Study ID	Data
t-106	I think that’s really the root of all of it, that they’re not motivated and that they have so much stimuli, they’re stimulated through so many other things, videos, you know, all this new technology that they come in and expect us to be that way. There are only so many hours in the day, so it does pose a huge problem.
t-117	As the work becomes more challenging and as the demands at home may be more challenging, then I think they reach a point almost I think of feeling overwhelmed and I think as educators we don’t do the best job that we could to help them with strategies in dealing with their stress and feelings of being overwhelmed. And I don’t know if that’s an organizational thing, that we need to work harder on, or if it’s a societal thing. Are we creating the hurried child? Hurry, hurry, hurry, get to the next class. Are we not allowing them enough time to dig deep into things before it’s time to go? To answer the question, I think, yes, they do want to do well, but I think sometimes they just get lost in the chaos of it. Some do, and then I think as a result, some do lose their motivation.
t-144	I have talked to people who teach the standard level and they see a lot of that, where the students might not do so well and they’d like to blame it on not caring as opposed to [not having] the ability.

Table 59, *Continued*

Study ID	Data
t-148	<p>... I've taught the lowest level where it's so much easier for them to give up because they have felt like the ones that aren't competent, that can't really succeed. ... I think they're interrelated to whether or not they care about school. If they know that they can't succeed for whatever reason, if it's because of a test score, if it's because ... they think the teachers don't believe in them, if they don't get the support at home, all of those specifically are related to their performance. ... [T]hey use all these excuses. "Oh, I'm not doing well." "I don't understand this." "This isn't fair." They turn outside themselves every other place in their life where they can't succeed. And of course "I don't care, why would I learn that? Why would I need to learn how to write that or communicate?"</p>
s-143	<p>I would say that I have so much overwhelming stuff. <i>Say more about that, what is the stuff?</i> Tests, quizzes, we got a lot of projects to do, and just like homework and stuff. <i>Is it hard to get it all done?</i> Yeah. <i>Are there times when you just can't get everything done?</i> Yeah. <i>And when that happens how do you feel?</i> A little disappointed 'cause I can't finish all of them but I always do it anyways 'cause it might not be due in to that same time that it's supposed to be but it's like the next day and stuff. <i>When you say not motivating what do you mean by that?</i> Not helping me and causing stress. <i>Are there other words you could use for not being motivating?</i> Probably but I can't think of them.</p>
s-143	<p><i>When you're not motivated what are you like?</i> Mad, stressed out. <i>Do you ever just not care?</i> Sometimes, like, sometimes I'm like, "Oh, I don't want to do this. I don't even care about it." <i>But are you saying that because you really don't care or because you can't take it, it's too much?</i> Probably both.</p>

“Don’t Feel Like It”

Teachers also described students as unwilling to invest effort in their schoolwork. Several lamented the fact that even if they can hold students’ attention during class, many students cannot, or choose not to, sustain the effort required to complete assignments once they leave the classroom. Data from student interviews corroborated this perception. Many students spoke about a lack of motivation for school as “not wanting” to study, participate, or complete homework. In some cases, teachers described this perception as an attitude on the part of students.

A great deal of congruence was found with the conceptual definition for amotivation. However, as noted in Chapter 2, the conceptualization forwarded in the research literature differs from the operationalized definition, which focuses instead on students reasons for being in school. Thus students’ responses in the present study represent a potential starting point for developing a measure of amotivation consistent with its conceptual definition.

Table 60

Dominant Theme Exemplar Data: “Don’t Feel Like It”

Study ID	Data
t-101	It’s the kid that’s a bump on a log, and ... It’s kind of like, I’m floating through life and this is nice and what do you have to offer me and at the least amount of work and things I can do.
t-106	I think if they were more motivated and more open to things, or at least accepting of things, that this is not like my video games and this just can’t be this way and a little more understanding to that, I think a better attitude toward it all would just be helpful.
t-114	I really think it’s challenging for all teachers because we really want to engage them to learn and we want them to learn and if they’re not motivated, we’ve lost them. They put the wall up and it’s not coming down.

Table 60, *Continued*

Study ID	Data
t-115	Well, their attitude, the ones that fit in this category, their attitude is—you just have the feeling they're not terribly interested in what they're doing. More because of the.—I teach religion and French, especially for the French – if they have the attitude that they're not going to take it in high school, [then] it's not a high priority to them, it really isn't.
t-142	Well I always say that if we could bottle motivation we'd be billionaires! You can give all of the study skills, you can talk one-to-one to students, you can say, you should try this, this is not working for you, let's try this, whether it be rewriting your notes or studying little bits at a time, making flashcards, whatever. And if they don't want to do it...
t-152	Then when you ask them, you say, well, how come, did you turn in the project, or this homework did you understand it?... Because a lot of them will say, you'll have a few that you know maybe didn't put in their effort and then they'll try to mask it and say "I had a hard time" but there'll be some that just will point blank say, "I didn't want to do it, I didn't feel like doing it." Or, "I just didn't get to it." And you say, "Why didn't you hand something in? Something's better than nothing. Don't you want to get some credit?" So I don't know, and every so often, you push them a little bit or when their grades are coming in and they're getting a little bit more agitated about grades, that's when they'll say, "Well, I really don't care about school. I don't want to do this." So they're a little bit more forthcoming now. You'll have some that will have an excuse but some will actually be very honest with you.
t-154	[T]hey're very interested in history and a lot of the topics that we're talking about but it's just that when it comes to outside of the class something else must be more important or they won't feel like it's necessary for them to do homework and the motivation kind of leaves them when they leave the school.
s-114	<i>When you say not motivating what do you mean by that?</i> Doesn't, like, it makes you, like you don't really want to keep going. You just want to stop and do nothing really.
s-204	<i>When you say not motivating what do you mean by that?</i> To not want to do something, like you feel like you're forced to do it and you don't want to do something.
s-208	<i>Now let's talk about some things in school that are not motivating for you. If you can say some things that are clearly not motivating for you in school. Tests, studying, homework, schoolwork, and all that boring stuff. Tell me what makes it boring. I want to understand really well.</i> 'Cause it's hard work that isn't fun.

Table 60, *Continued*

Study ID	Data
s-256	<p><i>When you are not motivated, what are you like?</i> I don't want to do anything. I just want to sit around and be lazy.</p>
s-340	<p><i>If asked your friends whether they find school motivating or not motivating what would they say?</i> Most of them would say not really motivating but there are a few of them that like try to keep their grades up but they always joke around that I try too hard in school, so they're not really as motivated, but they try to be. <i>Why do you think that is?</i> I think it's cause it takes a lot of effort and like last year comparing to this year I can see how much more effort it takes. So with all the like not a lot of time we have in school and out of school that it's not really worth it to put time in to them. (...)They just see it as, "it's school" and they don't think that they can do better, so they try to just keep going and not like work extra hard on one assignment because they know there's going to be another one. So they just like don't want things, like, they don't work as hard for the one little thing. They might work hard for like the final, but they won't work hard ...</p>
s-391	<p><i>Why do you think you're not motivated for your homework?</i> Cause it gets in the way ... Sometimes it's all right but most of the time I'm tired when I get home from school and I just want to sleep or do something else.</p>
s-404	<p><i>So, the teachers that think you're not motivated, why would they say that?</i> I just sit there, don't try hard, don't do some of my work. <i>Do you know why that is?</i> Why what? <i>Why are you like that in some classes?</i> I don't know, it's like, I mean, I'm interested in the subject sometimes but I just don't feel like going home and doing all that work.</p>

"Nothing to Do with Me"

Another key theme to emerge was an apparent lack of relevance to students' present condition. Notably, many teachers described the future value of school, but few articulated a clear argument in favor of the *present* value of education. When probed for how they respond to students' questions and complaints about the usefulness of school, teachers tended to be highly pragmatic and describe distal goals such as how a skill could

be used in a specific profession, or how students would need the information in college classes. Many students echoed this theme as well, expressing discontent with a perceived lack of school's relevance to their present experience and ambivalence regarding the persuasiveness of distal goals as sufficient reasons to meet the present demands of school.

Although meaningfulness was included on a handful of items across different measures, the research-based conceptualizations considered do not constitute a concerted effort to tap students' perceptions of school's relevance to their present experience. The prevalence of this theme in students' responses suggests that future research should target this issue.

Table 61

Dominant Theme Exemplar Data: "Nothing to Do with Me"

Study ID	Data
t-107	Yeah, honestly, it really is apathy, they don't really care, they don't see why they're there. Honestly, they don't see the bigger picture of why they're there, why they should be there, what's important about it. You can talk till you're blue in the face. They understand you, but it doesn't sink in because of their world view.
t-112	It's really hard for them. They don't see the point. ... "When is this ever going to be useful to me." "I'm not ever going to be a scientist or a mathematician." So I think that they can be just apathetic, and feel like, "It's not important to me so I just don't care."
t-117	I often will say to them, "Well if you become a scientist, or if you are someone that may study computers, you will use these things." The point is, I try at least to come up with some real world examples for them as to why they may need this. And then often, "Well, I'm not going to be a scientist." "Well, even if you're a professional football player you will still need to be able to count your paycheck..." I just try to pull in real world examples.
t-119	[T]hey're egocentric, "What does this have to do with me" So I think if we kind of spin it a little to make it look like it really applies –whether it does or not, which it does, but—then it gets them interested to a certain level.

Table 61, *Continued*

Study ID	Data
t-122	They always have to have a link to what's important. It's almost like money in the bank. "If I don't need this why should I spend 5 minutes of my time doing it." They have to see the big picture all the time. If they don't see the big picture it's not important. Everything is instant gratification but if they don't link it with anything in the future, it's like "it's not important."
t-149	I think that students find some subject matter in schools to be irrelevant to their lives and of course I think adolescence is when you start to question a lot of things and to oppose a lot of things that you've always kind of taken without question. So I think that students find especially math to be totally irrelevant to their lives and they don't need it and why are we doing this. And I think that might be part of the problem.
s-149	<p><i>What is the connection for you between your schoolwork and your life right now. Not later like when you're going to high school or to get into a good job but for now, what's the connection for you?</i></p> <p>I don't get it.</p> <p><i>Do you see a connection to your real life?</i></p> <p>Oh, yeah.</p> <p><i>Can you give me an example of something?</i></p> <p>Umm. Like, this is a hard question... do I have to answer?</p>
s-170	<p><i>What makes you interested in a class?</i></p> <p>Well, it being fun and knowing that I can learn in that class and that it's important and it has to do with life after school.</p> <p><i>Say more about that, life after school – in which way?</i></p> <p>Like, social studies, like, you know what happened in the world, so you know why things are the way they are. And science, you know why things are the way they are, like, how they're made and stuff.</p>
s-231	Yes. I think so. Like, if I'm learning about (inaudible), like, in science again, like the human body, I'll be more interested in that because that relates to us, like, people that I know and things like that.
s-233	<p>... it's easy to forget why you're learning matrices in algebra. It's like, why? I think the most motivating teachers are the ones who really tell you why. I think if they incorporate a little bit more of that it would make it more motivating.</p> <p>(...)</p> <p><i>What would make school more motivating for students?</i></p> <p>More motivating for students? Let me think. Maybe more, more opportunities to see what it's doing for them.</p>

Table 61, *Continued*

Study ID	Data
s-254	<p><i>What are the reasons for having those classes?</i></p> <p>They're just not my favorite. They just really annoy me, like, what's the point of learning lots of stuff that happened 50 billion years ago. Like, what's the point?</p>
s-279	<p><i>When you say not motivating what do you mean?</i></p> <p>Like every other student, you start to think, how is this going to help me, will I use this.</p> <p><i>Can you say a little more about that?</i></p> <p>Well it just seems, if I look at my family and how much math they use in their life, it's about 3/4 of the math I use it seems like I might not use it in my regular life.</p>
s-256	<p><i>Now let's talk about some things in school that are not motivating for you. What are some of those things?</i></p> <p>Homework. That's one. And, uh, I'm not really sure. Some classes, like I said.</p> <p><i>And why are those things not motivating?</i></p> <p>They're just not fun to be in. It makes no sense.</p> <p><i>"It makes no sense" – say more about that.</i></p> <p>I know that it's going to help in the future but it's not helping us now. We're basically just doing work and getting nothing back out of it. So I think it's not worth it.</p>
s-313	<p><i>What would make school more motivating for students?</i></p> <p>Probably if it was like, they mixed in stuff they wanted to learn about. You know, like, I know everything in school is boring, not like is boring, but some stuff is obviously a little boring, but I think they should try to make it a little more interesting instead of just going on and on.</p> <p><i>When is something interesting for you?</i></p> <p>(...) I don't really know what'd make kids more motivated. Maybe if they had something that told people about why they're here and why they're even going to school, then I'd probably be more motivated.</p>

Goal-Directed

Several teachers cast students' motivations in terms of goal-directed behavior, and students in the present study also spoke of striving to meet school-related goals. These references to goals emphasized the extent to which students had established goals for themselves and were consciously pursuing them. Since the kinds of goals identified in these statements do not reflect the definitions assigned to goal orientations, they were grouped separately from responses suggestive of work avoidance or performance orientations.

The conceptual definition of adolescent apathy, as well as the measure used to assess its degree of manifestation, leans heavily on individuals' goals. The AAI asks participants about college and career plans, as well as their level of ambition. However, as noted in Chapter 2, goal statements are blended with a wide range of other indicators.

Table 62

Dominant Theme Exemplar Data: Goal-Directed

Study ID	Data
t-104	To give them short-term goals to something that's close enough in their future that they can see. Because as far as when they're grown up and how what they're not doing now is going to affect them is too far away for them to grasp. Something that could be a privilege or a short-term goal.
t-121	Lazy, that's a big one. A lot of kids have the motivation, they just are lazy about it. Like not-determined, don't really have a goal. A lot of times that's the problem, that they don't really know what they want to do. So they don't really have the motivation to do, or to get to that goal because they don't know what they want to do. Goal-oriented, not goal-oriented, I guess. Things like that.
s-149	It's just because I don't want to end up like some people end up, working in factories, well, I don't think that's bad it's just I don't want, and I want to be a [profession], that's been my main goal, and I just want to finish school, be a good student.

Table 62, *Continued*

Study ID	Data
s-254	Personally, it's really up there because my goal is to become a [profession] and like you can't get like become a [profession] with like failing grades. I have to have like As and Bs, so.
s-292	<i>When you use the word motivating, what do you mean by that?</i> Just like, that drives you, the drive to not necessarily perfection but drive to obtain goals.
s-390	<i>If I asked your friends whether they find school motivating or not motivating what would they say?</i> I think most of them would say motivating. <i>Why is that?</i> Because they're all really focused on getting into a good college and they have the same goals as me, so.
s-457	What things motivate? Um, My parents, friends and mainly my goals, like going to a good college some day and going to high school, you know, being able to do what I want with my life and going for it, so.

"Not Interested"

Students' lack of motivation was conveyed repeatedly by both student and teacher participants as a lack of interest, often specific to subject-matter. Many teachers spoke of endeavoring to render their content interesting and of students finding their content area interesting (or not). Similarly, when asked what aspects of school they found not motivating, a large number of students cited a lack of interest in the domain. Moreover, several student responses suggest that a lack of motivation conceptualized as a lack of interest constitutes an antecedent to a range of behavioral indicators of motivation, such as persistence.

This folk conceptualization bears close resemblance to the definition and operationalization of apathy syndrome. Four of the 18 items on the apathy syndrome

measure ask about participants' interest in learning new things, doing things that interest them, and having new experiences (Marin et al., 1991).

Table 63

Dominant Theme Exemplar Data: "Not Interested"

Study ID	Data
t-103	They seem to be motivated on topics that they're interested on.
t-115	They all feel very highly about themselves. To me it's just a matter of what do they find interesting. You get that label, "It's boring, it's not interesting."
t-120	Certain topics that are really interesting, the content is really high interest, they get right into it. Although what's interesting for one is not necessarily interesting for another. We do try in my classroom to make it well-rounded so that we have all kinds of information.
t-124	[W]hen I think of kids who aren't [motivated for school] their interests lie in other areas. We have a couple kids who would rather be outside playing, or outside of school fixing something, or doing stuff with their hands as opposed to mental.
t-144	I noticed quite a bit of apathy in those students, students who just didn't find [subject] interesting, and you know the grades they got, if they got a 70 they were thrilled with a 70 or if they got a 62 they would say "hm, not so bad!" I can't really give you an absolute percent. I'd probably say a third of the class I felt was apathetic towards [subject].
t-153	I would say in general the academic interest isn't prevalent. Let's say we read a book by, we're reading [classic book] now, I really don't think it's going to motivate kids to read something else by [author] unless it's assigned. They probably won't over their vacation go and check out [another book by author], for example. You might get a couple who might do that. But in general even among the honors students it would be no.
s-103	<i>Is there something different for you when you're motivated for the grades or when you're motivated to learn?</i> I definitely get better grades when I'm interested and I want to learn it. Sometimes it's a little hard. For social studies, I'm not the best in social studies, I'm just not interested in it, I don't really care what happens in the past. But, so, I don't really do that good in social studies but I've been getting better, so, I kind of try and make myself interested in it.

Table 63, *Continued*

Study ID	Data
s-123	<p>It doesn't really interest me. Much. Like the past and social studies, like I like war and that stuff, but not like learning stuff about it, and culture and stuff.</p> <p>(...)</p> <p><i>When you say not motivating what do you mean by that?</i></p> <p>Not interesting.</p>
s-205	<p><i>So when you say not motivating what do you mean?</i></p> <p>Things that I'm not really interested in and like, if I'm interested in something I tend to learn quicker but if I'm not then I don't.</p>
s-228	<p>Um, well, I like science because I love working with like all the different chemicals and like studying stuff. I like language arts because it helps me learn about different things.</p> <p><i>Like what?</i></p> <p>Cause like I'm not really a good writer so like when I learn about how to write paragraphs and stories that interests me because I like to write stories.</p>
s-251	<p>Yeah, subjects that I like, like chemistry. I think that's it. I really like chemistry, so far.</p> <p><i>Why do you find that motivating?</i></p> <p>Because I think it's interesting, so it makes me want to do it more.</p>
s-376	<p><i>If I asked all your teachers to give you a score from 1 to 5 on how motivated you are, would they give the same numbers or different numbers?</i></p> <p>Different numbers.</p> <p><i>And just say a little more about why you think that is.</i></p> <p>Because some things in class I'm more interested in and in other classes I'm less interested so I tend to, like, daydream sometimes, so I don't really pay attention in some classes.</p>
s-401	<p><i>How about particular subjects that you find motivating in school?</i></p> <p>I find my language class really motivating just because I like how other languages talk and how they go together with English.</p> <p><i>So are there some words you might use to describe those classes?</i></p> <p>Interesting, um, (pause). Yeah, interesting.</p>

Defending Appearances

Given the large body of research literature on goal orientations and self-concept, the theme of defending appearances was retained for consideration. However, it bears noting that very few students offered evidence of this conceptualization as an explicit driver of their lack of motivation for school. A handful of teachers described what could be labeled performance-avoid orientations. This may have been due to the questions posed in the interview protocol, which, particularly for students, did not explicitly probe for this conceptualization.

Table 64

Dominant Theme Exemplar Data: Defending Appearances

Study ID	Data
t-142	Many students will come into my class, even on the honors level and I'll ask a question and they'll say, "I don't know." Maybe because they're not sure and they don't want to embarrass themselves. Or they don't know the answer or they don't want to try. You have to have an atmosphere in your classroom that accepts all answers, that you don't let other kids snicker if the answer's off the wall, that you respect every answer...
t-149	Well, I would say that the students who I have in honors level classes do find that important, they don't want to answer a question wrong in class, they get embarrassed by that. They want to look like they know what they're doing.
t-151	Before [the honors students] came in [the standard level students] weren't, they wouldn't really care if they said a wrong answer in class, they would kind of think it was funny and laugh. But then when the honors class came in ... it wasn't so good to not have the right answer. The kids would all look at them, "I can't believe you got that wrong." So I think it's really important to them to appear to their peers that they know what's going on.
s-239	And history, if you're, like, talking to someone, you always sound more intelligent if you know what you're talking about. Especially in history, like, if you know your facts you just look a lot better.

“It’s Boring”

Among student participants, the term “boring” surfaced with great frequency when asked for synonyms for “not motivating.” Thirty-nine of the 59 students interviewed volunteered this term, many of them repeatedly during their interview. The term boring or bored was used nearly 120 times across all student interviews. In contrast, these terms were recorded over all teacher interviews a total of only 14 times. This result replicates findings from Sax and colleagues (2001) who found that over 2 in 5 college freshmen nationally reported frequently feeling bored in class during their senior year in high school.

“Depends Which Subject”

Interview data also offered a great deal of support for a conceptualization of domain-specific school-related apathy. Forty-two of the 58 student participants offered evidence of domain-specific motivation or lack of motivation. A conceptualization of school-related apathy as bound to subject matter was described by over one-third of teacher participants. This result thus suggests that future research should examine the domain-specificity of students’ lack of motivation.

Summary of Conceptualizations of School-Related Apathy

In sum, twelve overarching conceptualizations were identified from teacher and students interviews about students’ motivation and lack of motivation for school. Both students and teachers described aspects of motivation in terms of getting good grades, securing a future good, lack of volition, lack of interest, and goal-directedness. Statements from teachers suggest that they perceive students’ lack of motivation in terms of being overwhelmed and confused with the demands of school. Some teachers also

suggested that students' need to defend their appearance in front of peers is central to their motivation, or that students simply don't care about school. For their part, students spoke of frustration or demoralization at not understanding subject matter, and at a perceived lack of relevance of school to their present situations. There was some evidence to suggest that teachers (and others) need to do more to communicate to students the present value of an education and to assist students in personally verifying that claim (Giussani, 1997).

While counterparts to many of these folk themes were identified in the research-based literature on school-related apathy, student and teacher responses brought to light some additional directions worthy of pursuit. Specifically, qualitative data in the present study suggest that students' access to meaning, both in terms of understanding the content and as regards meaning for their present experience, are closely bound to their lack of motivation for school. In addition, data culled from student and teacher interviews indicate that an emphasis on earning high grades for admission to high schools and colleges may be undermining the development of students' motivation for the content itself.

Prevalence of School-Related Apathy

The introduction to the present study presented a series of statements by researchers and educators regarding the much-discussed but little-documented problem of students' lack of motivation for school. To address this gap in the literature, the interview protocol was designed to gather teacher and student perceptions of the prevalence of students' school-related apathy.

Four aspects of the interview data were generated to inform this estimate. First, the teacher interview protocol included a highly open-ended question regarding students' motivation for school. Second, teachers were asked whether motivation posed a challenge to teachers, and if so, where it ranked among the other challenges they face. Third, teachers responded to interview questions specifically about the proportions of their current students they would characterize as apathetic toward school. Finally, the student interview protocol asked what aspects of school students found motivating and not motivating, and whether their friends considered school motivating or not.

The open-ended questions revealed that rather than perceiving students' motivation levels as a continuous range, many teachers sketch 2 to 3 distinct groups of students. Several spoke of motivation as a "mixed bag," or of a "disappearing middle." Nearly two-thirds found motivation to be a prominent challenge facing teachers, and only 5% placed student motivation low on the list of teacher difficulties. Teacher estimates of the proportion of students exhibiting low motivation ranged from 10% to 90% and averaged roughly 25%. Moreover, data from student interviews also suggested that lack of motivation for school represents a key problem to be addressed. Many student participants volunteered characterizations of two groups of friends, describing some students as motivated for school and others as not interested.

In sum, data from teacher and student interviews analyzed in the present study empirically document anecdotal statements that lack of motivation for school is indeed a problem. These data place estimates of school-related apathy at about 1 in every 4 students.

Operationalizations of School-Related Apathy

When asked how they would detect students' apathy toward school, teachers presented a consistent set of core indicators. They reported looking for students' body language and for students who are unprepared for class, who don't complete homework or turn in low-quality work. According to many teacher participants in the present study, apathetic students are "just there;" they don't participate in class activities or ask questions, and may pose discipline problems. Low grades also trigger teacher judgments of students' apathy toward school.

Students' operationalizations of low motivation were elicited by asking students what they are like when they are not motivated or by asking how someone would be able to tell by seeing them that they were not motivated. The indicators offered by students bore remarkable consistency to those identified by teachers. In addition, many students considered "not trying" as an indication that they were not motivated, and, conversely, that trying or putting in effort signified motivation.

Table 65

Exemplar Data: Operationalizations of School-Related Apathy:

Study ID	Data
t-102	Lack of participation in class, lack of emotion when they get their grades back, no matter what they get, a bad grade doesn't affect them. The fact that if they don't come to class for extra help, because I'm very available for help after school every day, in the morning, every day. So if they just don't come and I tell them and I put on the report cards, "should come for extra help" and I tell them, and they just don't come, you know, it shows me that they're apathetic, they just don't care.

Table 65, *Continued*

Study ID	Data
t-106	[T]hey come in and they're already moaning about , "Now, what are we going to do today" and "Are we going to have homework?" I mean, the day hasn't even started and they're already kind of festering this idea, and it's always like, slow walking and just kind of like, you know they don't want to be here. Their body just screams it. And you very rarely get them to smile or get excited about anything. There are those rare moments, but for the most part, you can tell that if they could be anywhere else...
t-133	Low test grades, quiz grades, lack of doing homework, lack of class participation. Just general apathy towards the class.
t-141	They're just kind of there, they're like a lump on a log. You know, it's like, they don't want to participate. Whether you're doing—like we do this thing where we do density of a person where I completely submerge the kids in water. Most kids get really excited about that and then you'll have your "I don't care." Usually there's one or 2 in a class.
t-154	Body language... like the way they sit, they look out the window, talk to their friends, act like they're too good for it. They don't think that it's necessary to learn, they say it right out, you know, and I think it's most obvious through their body language.
s-147	I just pay attention in class, and do pretty well on all my tests.
s-188	My posture and like how I'm looking at it. If I'm slouched on my desk, if I just don't want, just like my face expression. That's how, I guess, like my posture.
s-206	I'd probably be slouched over my books and have my hand on my forehead.
s-231	Sometimes I get bored in something. Say if I'm doing a subject like social studies and it's not interesting to me, then I'll tend to probably not pay attention very much in class and then not really study that much for that certain section.
s-233	Catching myself from, you know, slumping down, and just kind of sitting back and watching. And sometimes there are classes that I'm not into as much as I'd like to be but at least looking at the teacher while she's talking. Asking questions, I always ask questions.
s-251	Through my effort, and my grades, how I act or portray myself in the class
s-279	Taking good notes, answering questions, asking questions
s-302	How hard I'm working, if I always like am participating and just trying to do good.

Table 65, *Continued*

Study ID	Data
s-376	I pay attention, and I'm doing my work.
s-400	<p><i>If I asked all your teachers to give you a score from 1 to 5 on how motivated you are, would they give the same numbers or different numbers?</i></p> <p>I think, well, I got straight As and not to brag or anything but they would hopefully say high numbers.</p> <p><i>So they'd give almost all the same numbers?</i></p> <p>Yeah I think so.</p> <p><i>And because of the grades or because they see something else?</i></p> <p>Well I think because of the grades but I don't like disrupt class or anything and there's not like one class where I just go wild in, so.</p>

Individual and Group Differences

This portion of the analysis sought to quantify interview data by examining frequency of codes between levels of participants on key individual differences variables. Specifically, the analysis explored between-group coding patterns with respect to gender, grade-level, and apathy classification.

Gender

Data from student interviews evidence the presence of some gender differences. Over half (51%) the female interviewees indicated that they liked learning compared to only 29% of males. A greater proportion of males (48%) than females (24%) volunteered doing their best as an object of motivation. Notably, nearly a quarter of female interviewees (24%) spoke of perceived pressure from parents to do well in school, whereas no males raised this issue. Many more females (51%) than males (29%) distinguished some friends from others in terms of their levels of motivation.

Grade-Level

Interview data also suggested some grade-level differences in teacher and student conceptualizations of school-related apathy. More teachers of 10th graders (80%) than of 8th graders (43%) spoke about students' motivation for school in terms of goals or a drive to succeed. Tenth-grade teachers (87%) were also more likely to identify the role that tracking plays in students' motivation for school than were 8th-grade teachers (4%). This however is likely due to the absence of tracking in the schools that enrolled the 8th-grade participants. In addition, 10th-grade teachers (53%) spoke of involving students in class as a pedagogical tool to improve motivation more often than did 8th grade teachers (13%). Interestingly, an operationalization of students' school-related apathy as acting like they don't want to be there was cited by over 2 in 5 8th-grade teachers (43%), whereas no 10th-grade teachers mentioned this indicator. Finally, more 10th-grade teachers (87%) than 8th-grade teachers (52%) spoke about taking specific actions in response to low student motivation.

Student participants also presented grade-level differences in the themes they raised in response to interview questions. More older students (79%) than younger students (45%) spoke about motivation in terms of interest, and more 10th-grade students (45%) conceptualized motivation as doing well than did 8th-graders (26%). More older students (26%) than younger students (3%) indicated they would rather be engaged in other activities than school. Finally, not trying hard was offered more often as an operationalization of apathy by 10th-graders (66%) than by 8th-graders (38%).

Apathy Classification

Prevalence of themes between student groups based on teacher apathy nominations were also examined. Seventy-three percent of students with no apathetic nominations spoke of liking school, in contrast to 57% of students receiving at least one apathetic nomination. There was some evidence to suggest that students assigned to the highest motivation category based on teacher nominations were more attuned to achievement as a goal of schooling than were those in the lower apathy categories.

More students receiving at least one nomination for apathetic (82%) expressed a view of motivation in terms of doing well than did students with no apathetic nominations (57%). Students with apathetic nominations also defined lack of motivation for school as laziness or not putting in effort (93%) than did their peers without apathetic nominations (67%). When asked what would make school more motivating, more students with apathetic nominations (39%) than without (10%) suggested increasing student involvement during class.

Summary of Differences

The comparisons described in this section are not intended to bear the burden of generalizability, as they are based on a small sample of students and on general themes culled from open-ended interviews. Nevertheless, these findings suggest that 10th-grade students and their teachers are more concerned with achievement than are students and teachers at the 8th-grade level. While not surprising given the fact that older students are approaching important life decisions, this represents an important consideration for future research and intervention.

Data distinguishing teacher-identified apathetic students from non-apatetic students also offer insights into responding to school-related apathy. Specifically, research and intervention could explore strategies for assisting students to overcome self-diagnosed laziness, and for shifting students' focus from earning high grades to discovering an interest in the subject matter. Similarly, teacher practice serves to benefit from the indications that emerged here and from additional research into the perceptions of apathetic students.

Is Apathy the Right Term?

One aim of the present study was to explore the viability of the term “apathy” as a descriptor of students' lack of motivation for school. Seventy percent of teachers confirmed in interviews that they had heard other teachers describe students as apathetic, suggesting that, at least to some extent, this term is being applied to describe students' lack of motivation for school. When asked whether they would characterize any of their current students as apathetic, 87% responded in the positive. In addition, several teachers commented that although they had not used the term before, “apathy” did indeed capture the malaise of low motivation they observed in students.

Summary

In sum, the findings presented in this chapter support the hypothesis that folk perspectives drawn from open-ended interviews serve to both validate and enhance research-based conceptualizations of school-related apathy. These data suggest that lack of motivation is a substantial challenge currently facing teachers and students. Future research is in order to explore the interconnections between emergent themes, and to

develop measures based on the conceptualizations documented here that have yet to be taken up in systematic studies of students' apathy toward school.

Among the avenues for future research is the resolution of the tension students perceive between buying in to the importance of education for the future, but not seeing a present value. Thus they feel a tug between what defines their life in the present, their interests, and so on, and the demands of the life that awaits them, sometimes many years down the road. There is some evidence that this tension is exacerbated by teachers' emphasis on the challenges that await students as they move on to high school, college, or the work force rather than on the "clear and present value" of education.

CHAPTER VI

SUMMARY, DISCUSSION AND IMPLICATIONS FOR FUTURE RESEARCH

This study was undertaken to explore research-based and folk conceptualizations of school-related apathy with respect to definitions, construct independence, and relation to select individual and group differences including grade level. In this chapter, the quantitative and qualitative results described in prior chapters are summarized and integrated leading to conclusions. Following a summary of findings, limitations of the study are considered. A general discussion and recommendations for future educational practice and research bring the chapter to a close.

Summary of Findings

The aims of the present study translated into three research questions. This section summarizes findings for each question in turn by presenting and integrating key results obtained via quantitative and qualitative methods. Specifically, these questions were:

- 1a. To what extent are research-based conceptualizations of apathy toward school statistically independent?
- 1b. How do teachers and students conceptualize school-related apathy, and to what extent are those “folk constructs” consistent with research-based conceptualizations?
- 1c. How prevalent is school-related apathy in students, and how do students’ and teachers’ beliefs about its prevalence compare?
2. How is self-reported school-related apathy related to select individual and group differences variables and what patterns among those variables characterize groups of students?

3. Is there variation between 8th and 10th graders in the conceptualization, prevalence, and associated individual and group differences of self-reported school-related apathy?

Research Question 1: Defining School-Related Apathy

Statistical Independence of Research-Based Conceptualizations

The first research question comprised three segments, the first of which asked to what extent research-based conceptualizations of apathy toward school are statistically independent. Analyses performed on student responses to self-report measures of adolescent apathy, amotivation, apathy syndrome, disengagement, and work avoidance confirmed the hypothesis of the present study that although these constructs reflect some independence, there is substantial overlap among them. In particular, adolescent apathy and apathy syndrome were strongly associated, as were work avoidance and amotivation. Apathy syndrome and work avoidance were also strongly related.

One potential reason why strong relations were observed among apathy variables is similarity in items used to assess each variable. In light of this concern, the items constituting each measure were analyzed for overlap. For the most part, sets of items represented distinct, albeit subtly so, conceptual definitions. In several cases, an argument could be made that one measure accessed an emotional characteristic that was tapped behaviorally or cognitively by another. For instance, on the adolescent apathy measure, students rate their level of agreement with the statement, “I’d rather sleep than go out with my friends.” This item taps a preference. On the apathy syndrome measure, the item “I have friends” is closer to a directly and externally observable fact.

Another explanation for the emergence of the pairs of strongly related constructs is their level of generality. Operationalizations of apathy syndrome and adolescent apathy targeted respondents' general experiences, whereas amotivation and work avoidance pertained specifically to school. The strong relation between work avoidance and amotivation is consistent with prior research documenting a moderate relation between these constructs among undergraduate students (Smith et al., 2002). However the substantially greater strength of relation among participants in the present study suggests that younger students may possess less differentiated perceptions of work avoidance and amotivation than do older students. Based on an examination of the items used to assess these two constructs, students scoring high on both measures could be interpreted as expressing, "I do not see what I am doing in school, so why should I do the work?" However, purely correlational data cannot inform a causal relationship. The temporal relation between these constructs thus warrants investigation.

Apathy syndrome in particular was strongly related to the other variables. One interpretation of this result is consistent with the conceptual definition of apathy syndrome as a simultaneous diminution along emotional, cognitive, and behavioral dimensions (Marin, 1990). Adolescent apathy items tended to tap indicators of a general lack of affect and activity. Work avoidance and amotivation, which pertain to school contexts, may represent school-specific indicators of what the measure of apathy syndrome taps on a more general level.

Cluster and factor analyses shed further light on relations among the research-based apathy conceptualizations. For the full sample, the formation of two distinct clusters differing significantly on all five apathy variables argued that substantial

variance is indeed shared among these variables. Of note was the observation that students in the high apathy cluster scored comparably above the average on all five apathy measures. One possibility is that these conceptualizations are each tuned in to distinct yet related issues that taken collectively assess a condition that could be referred to as school-related apathy. Another possibility is that the relations between variables indicate conceptual overlap.

Exploratory factor analyses performed at the item level lent support to the hypothesis that a more stream-lined conceptualization and measure of school-related apathy could be achieved. Items associated with each of the 5 apathy measures did not load together, as would have been expected had the sets of items tapped theoretically independent constructs. An examination of factor loadings and subsequent dropping of roughly half the original items yielded two hybrid factors—School Irrelevant and Positive Life Interest—with theoretical consistency and high reliability. The strongest contributors of items to these factors were amotivation, work avoidance, and apathy syndrome.

The two hybrid factors showed themselves to be strong predictors of the individual and group differences assessed in this study. The fact that the hybrid factors were comparably efficient in predicting individual differences suggests that these items could be used in place of the larger set of items to tap the complex of indicators of students' apathy toward school. The theoretical consistency of the items forming the two hybrid factors also points to the importance of pursuing the role of relevance and an attitude of interest as they pertain to student motivation and performance in school.

Research-Based and Folk Conceptualizations

The first research question also inquired into teachers' and students' conceptualizations of school-related apathy, and the extent to which "folk constructs" are consistent with research-based conceptualizations. A number of noteworthy findings emerged in this portion of the analysis. First, classifications of students as apathetic or non-apathetic by research-based measures and by teacher nominations reflected only moderate agreement. In particular, many of the students receiving teacher nominations for school-related apathy were not identified as such by the research-based constructs. Greater agreement between perspectives held for those classified as non-apathetic.

A second key finding can be drawn from comparing results on the amotivation scale to the dominant themes that emerged in teacher and student interviews. The items used to operationalize amotivation focused on students' reasons for going to school. Students rated their level of agreement on items such as, "I once had good reasons for going to school; however, now I wonder whether I should continue." Scores on this measure were extremely low and skewed positive, denoting that across the board, students had reasons for being in school. However, when asked in interviews what their reasons were for being in school, students overwhelmingly identified future consequences such as gaining admission to college or securing a high-paying job. Many students were at a loss to identify reasons for being in school in relation to their present experience.

Related to this finding was the observation that items tapping amotivation did not closely reflect its conceptual definition, which focuses on lack of intention to act resulting from lack of valuing or lack of competence for an activity (Ryan & Deci, 2000b).

Interestingly, however, lack of intention to act did surface as a dominant theme in interview data (i.e., “Don’t Feel Like It”). Moreover, although competence and valuing were not explicitly tapped by the amotivation measure, these themes also emerged as dominant in interview data. The role of value was reflected in teachers’ comments regarding students not caring about school (i.e., “Caring Less”). In a conceptualization that could be interpreted as running parallel to competence, many students spoke of demoralization at not understanding the material, as evidenced in the dominant theme “I Just Don’t Get It.”

A large body of prior research has explored the roles that value, perceived competence, caring, and goals play in student motivation and academic achievement. Although the present study sought to examine a focused conceptualization of apathy toward school, it is important to set the findings reported here in the context of these broader literatures. However, even though a few items from the 97 apathy and individual difference measures either hinted at or addressed these extended themes (e.g., competence: “I think I am smart;” value: “Spending time with friends is important to me;” goals: “I know what I want to be when I grow up;” caring: “I can’t see why I come to school and frankly, I couldn’t care less.”), the majority of items did not directly tap these areas.

Consequently future research should examine the relation between school-related apathy to these prior findings and existing theoretical perspectives. For instance, students high on school-related apathy may fail to set goals, or may not see the value in school. Students may also feign apathy as a maladaptive response to perceived lack of competence. Research on the relation of school-related apathy to goal content (e.g., Ford

& Nichols, 1987; Sheldon, Ryan, Deci, Kasser, 2004; Wentzel, 2000), value (e.g., Wigfield & Eccles, 2000), and competence (Ryan & Deci, 2000a) all represent important avenues for continued research.

Also noteworthy was the finding that teacher-nominated apathy groups differed significantly on all individual apathy variables except apathy syndrome, suggesting that teachers either did not register students' differences in apathy syndrome characteristics, or did not consider characteristics associated with apathy syndrome to be salient to their conceptualization of school-related apathy. Alternatively, the measure of apathy syndrome may have been too general and thus insensitive to students' school-related apathy. Interview data support the latter interpretation, as interest played prominent roles both in the delineation of a dominant theme based on teacher and student comments (i.e., "Not Interested"), as well as in the operationalization of apathy syndrome, which included several statements about interest.

Another outcome of the comparison between research-based and folk conceptualizations was the identification of the theme of personal meaning and relevance from teacher and student comments. Amotivation reflects this theme to some extent. Moreover, the hybrid factor "School Irrelevant" drew together a set of items that speaks to the role of personal meaning and relevance, themes that emerged strongly in interview data.

Regarding operationalizations of school-related apathy, striking agreement was observed between teachers and students. Key markers included body language such as staring blankly, not paying attention during class, being unprepared for class, and not completing assignments. There was some evidence that teachers and especially students

based motivation judgments on grades. Teachers also spoke of students appearing like they preferred to be anywhere but in class. Of the research-based operationalizations, work avoidance reflected the greatest agreement with those obtained in interviews.

Finally, the importance of conceptualizing school-related apathy as domain-specific came to light in interview data, as many students indicated different levels of motivation for different subjects. However, it was not clear whether these differences were attributable to the subject matter itself or to the teachers of those subjects.

Prevalence

The last part of the first research question asked how prevalent school-related apathy is in students, and compared students' and teachers' beliefs in this regard. Research-based estimates, hovering at 20%, were more conservative than those of teachers, who set the proportion between 25% and 31%. One interpretation of this finding is that the research-based conceptualizations were less sensitive to students' apathy than were teachers. Another is that teachers were overly sensitive in classifying students as apathetic. The former interpretation seems more reasonable, as teachers based their nominations on a long-term knowledge of students, whereas research-based measures only had one-time access to a thin slice of student characteristics. Regardless, both research-based and teacher perspectives indicate that a disconcerting portion of students in these grades lacks school-related motivation.

Here the question arises as to the nature of the apathy problem. Cluster results by grade as well as distributions of teacher apathetic nominations by grade paint a somewhat different picture compared to results from the full sample. At each grade level, roughly 8% of students were identified as markedly high on indicators of apathy. Yet another half

to two-thirds also fell into moderate clusters. Integrating indicators of prevalence with mean scores on the apathy measures suggests that the high apathy students are appropriately labeled as “apathetic” toward school. Their high scores across all negative measures of apathy as well as distress point to a serious problem being faced by such students. In contrast, it might be said that the students in the moderate groups reflected “low motivation” for school.

Research Question 2: Individual and Group Differences

The second research question focused on how self-reported school-related apathy relates to select individual and group differences variables and what patterns among those variables characterize groups of students. The hypotheses of the study for the research-based conceptualizations held. In the full sample, each research-based measure of school-related apathy significantly related positively to boredom proneness and distress, and negatively to well-being, curiosity, and achievement. The only exception was the non-significant relation between curiosity and disengagement. Thus the present study found mixed support for the validity of these apathy constructs. Further bolstering this conclusion was the finding that clusters created from research-based variables differed significantly on all five individual difference variables.

In addition, gender differences were detected for some research-based apathy and individual differences. Consistent with prior research documenting higher motivation for females than for males, the present study found that across the full sample, apathy syndrome and work avoidance were significantly lower for females than for males (Vallerand & Bissonnette, 1992). Results from earlier studies suggesting that females manifest more depression and lower self-esteem than males were also replicated in the

present study (Maatta et al., 2002). Within both 8th and 10th grade, females reported significantly greater distress than did males. Tenth-grade females additionally scored significantly lower than their male counterparts on well-being, but earned significantly higher GPAs. Taken together, these results indicate that females are performing better than males, albeit at a higher psychological price.

Expectations for individual and group differences were borne out to some extent with respect to teacher nominations of apathy. Across the full sample, boredom proneness and GPA differed significantly between the high and low apathy nomination groups, and omnibus tests on the apathy category groups yielded significant differences for boredom proneness, curiosity, and GPA. However no dependence was detected between gender and apathy nomination or apathy category group membership.

Also of note was the observation of significant between-group differences by religion, with Catholic students reporting lower apathy syndrome and work avoidance and lower boredom proneness than non-Catholics. The small numbers of non-Catholics prevented finer-grained comparisons. In addition, students reporting frequent practice of their religion reported significantly lower adolescent apathy and lower boredom proneness than did students who rarely or never observed a religion.

As noted earlier, several explanations can be forwarded to explain these results. For example, it is possible that non-Catholic students were in attendance at schools in the present study due to difficulties encountered in the public school system causing parents to opt for a private school environment for their children. This would have resulted in a sampling bias for non-Catholic students. Moreover, the non-Catholic group included those professing Protestant, Jewish, or Orthodox faiths, as well as those not adhering to

any religion, which limits the interpretability of this finding. Neither should it be inferred that practice of religion causes the observed outcomes. Regardless of the underlying reasons for these differences, results from the present study should not be generalized beyond Catholic-school students.

Research Question 3: Grade-Level Differences

The last research question inquired into variations between 8th and 10th graders in the conceptualization, prevalence, and associated individual and group differences of self-reported school-related apathy. A number of differences were detected in terms of mean levels of apathy variables and individual differences variables. Patterns traced by cluster analyses and teacher nominations also yielded valuable insights.

The older students in the study showed some signs of manifesting greater school-related apathy. Specifically, 10th graders reported higher adolescent apathy and were more likely to show up late for class than did 8th graders. Consistent with this finding, 10th-grade students in the high apathy category based on teacher nominations reported attending class unprepared, a finding that did not emerge for 8th graders. Unlike older students, 8th graders with nominations for apathy reported higher apathy syndrome and distress and lower GPAs. Minor differences were detected for gender as well, with males in the 10th grade but not 8th grade scoring higher on well-being than females. Data also indicated that relations between distress and some apathy and individual differences may decline with age. For 8th graders, distress was more closely (although not significantly) associated with boredom proneness, GPA, and amotivation than it was for 10th graders.

The cluster analyses performed by grade level offered interesting insights into patterns unique to grade level. For both grades, a highly apathetic cluster of similar

proportions emerged. These two clusters differed on amotivation, with 8th graders scoring higher than 10th graders. Both grades also evidenced two “midrange” clusters and one non-apathetic cluster. At the 8th-grade level, no noteworthy differences distinguished the two midrange clusters, although one group appeared higher on general apathy and the other on school-related apathy. The 10th-grade midrange clusters differed from the 8th grade pattern in two respects. First, four times as many 10th graders fell into the general apathy cluster as in the school-specific apathy cluster, whereas 8th graders were evenly split across these two clusters. Second, work avoidance was higher in the general apathy cluster for 10th graders.

These data are cross-sectional, and consequently causal or developmental conclusions cannot be drawn. However, these data are consistent with the possibility that over time some students “migrate” from the school-specific apathy cluster into either the general apathy cluster or the non-apathetic cluster. If this were the case, the shift of some students into the general apathy cluster could be attributed to an overall decline in motivation, whereas those transitioning into non-apathetic status may be motivated by the achievement aspects of school as college and other distal goals appear closer on the horizon. Longitudinal studies are needed to further explore and test this interpretation.

Limitations

Several limitations should be considered in weighing the validity and generalizability of findings from the present study. One limitation is that the sampling frame comprised only students enrolled in Catholic schools. Certain variables may have influenced both the decision of particular students to attend these schools as well as their levels and conceptualizations of apathy. This potential confounding limits the extent to

which findings can be generalized to students attending public or non-Catholic private schools. The aforementioned findings regarding religion and extent of religious practice underscore this concern.

In addition, the present study was cross-sectional rather than longitudinal. Although the sample was drawn from middle schools and high schools that serve the same students, causal claims should not be made regarding the role of schooling or development in relation to any observed differences between grades.

A further limitation of the present study regards the focus on lack of motivation, which resulted in the exclusion of constructs that may represent the opposite of apathy, such as intrinsic motivation (e.g., Ryan & Deci, 2000a). However, the findings regarding the low success of research-based measures in identifying teacher-nominated apathetic students argues against the use of applying pro-motivation constructs to detect students with low motivation for school. That is, although high scores on measures of interest are posted by students with interest, the converse may not be the case: low scores may not individuate students without motivation. Related to this concern is the non-specific set of items used to tap adolescent apathy and apathy syndrome, particularly in light of the results from interviews regarding domain-specific motivation. Future research is in order to better distinguish domain-specific lack of motivation from a general lack of motivation.

Finally, the teacher nomination process, while offering great potential for capturing teacher perspectives on student apathy, presented some challenges, with implications for interpretation of results. Specifically, variable numbers of teachers provided nominations for student participants, such that opportunities for disagreement

between nomination scores varied across students. Second, a different algorithm for assigning students to an apathy category would have yielded different results. Apathetic nomination groups may be more valid in this respect, since this variable identified students who were perceived as apathetic toward school by at least one of their teachers. In addition, this process potentially masked subject-matter differences which emerged in interviews as a salient consideration.

Implications for Educational Practice

A number of implications for educational practice are suggested by the results of the present study. The great majority of students with apathetic nominations from teachers spoke of having difficulty in putting in the effort required by school. The moderate to high levels of boredom proneness coupled with the frequent mention of boredom in student interviews may also signal a lack of capacity to remain focused on the task at hand. Many teachers commented on the hurried character of students' lives and on the high levels of stimulation inflicted by television, cell phones, video games, the Internet and the like. Thus instructional strategies that scaffold student work, targeting proximal goals that provide students with a sense of accomplishment, are recommended.

The results presented herein also indicate that instructional environments that foster student involvement could also contribute to inspiring students who are in short supply of motivation for school. The importance of interest to students for making school motivating reinforces prior research on the importance of linking to students' interests. In addition, it appears that students would benefit from a clearer communication of the relevance of the content and tasks of education not only to their future goals but to their present situations.

The repeated discussion of achievement across both teacher and student interviews suggests that an emphasis on earning grades may be overshadowing the emphasis on learning and students' relation to the content itself. Considered in light of the findings regarding lack of relevance of school to students' lives, instruction that emphasizes both personal relevance and the satisfaction that comes from learning also holds promise for increasing students' motivation.

The fact that teachers voiced folk descriptions of many existing psychological constructs suggests that school effectiveness would benefit from equipping teachers with schema for recognizing and addressing patterns in student motivation. Effective approaches to addressing students' learned helplessness and work avoidance have been documented in the research literature (e.g., Meece & Miller, 1999). Conduits for translating these research findings into easily digestible information for school practitioners are recommended.

Teachers may also benefit from proactive assessments of students' motivations for school. Such explorations could be facilitated by researchers. For instance, as a follow-up to the present study, participating teachers and administrators will gather with the researcher to review results and consider implications for their teaching practice. This approach to professional development holds promise as a realistic and personally beneficial way for teachers to apply data on their students to their classroom instruction.

Implications for Future Research

In exploring the viability of the term school-related apathy, the present study sought to document whether a lack of motivation for school currently presents a problem faced by students and their teachers, and, if so, to sketch its contours. A great deal of data

were presented and analyzed in the preceding pages. From these data and interpretations, an array of implications for future research have come into view. These areas for continued research include focused and systematic examinations of students' lack of motivation for school, the use of innovative methodological approaches for researching students' motivation, the integration of researcher and teacher perspectives on students' motivation, and the delineation of developmental pathways that may conduce individuals to a lack of school-related motivation.

Based on teacher and student operationalizations articulated in interviews, school-related apathy could be identified with a lack of emotional (e.g., lack of volition, lack of affect), cognitive (e.g., resistance to critical thinking; lack of attention to class activities and lecture), and behavioral (e.g., doing minimal work; physically disconnecting in classroom setting) engagement with school-related activities. However, identification—or detection—is not the same as conceptualization. In weighing the results of the present study, it is necessary to distinguish between what school-related apathy *is*, how it can be *detected*, and what *causes* it.

Returning in light of the quantitative and qualitative data gathered to the theoretical and conceptual considerations forwarded in the second chapter, I suggest that, at its core, school-related apathy is a lack of caring about the substance and activity of school and formal education that manifests in an array of cognitive and behavioral expressions and indicators. The data also provide hints at antecedents or causes of such apathy, including relations to perceived purpose of school, access to meaning, and personal relevance. Future research is necessary to develop measures that can accurately distinguish students' lack of caring from these other indicators. Subsequent research

could then apply results of prior investigations into perceived purpose of education (e.g., Lau, Thorkildsen, Nicholls, & Patashnick, 2000; Thorkildsen & Nicholls, 1991) and perceived meaning (e.g., Seifert & O'Keefe, 2001) to develop research designs that reveal developmental relations between school-related apathy and these issues.

Data on the research-based constructs corroborated a multifaceted diagnosis of school-related apathy, with constellations of variables individuating patterns of students' school-related motivations. Such a broad collection of indicators highlights the tension researchers face between gaining conceptual clarity (i.e., "what is school-related apathy?") and identifying sets of powerful predictors of valued outcomes (i.e., "what does school-related apathy predict?").

Fredricks et al. (2004) acknowledged this tension in their literature review examining the potential of the multidimensional concept "engagement" for researching students' school-related motivation. They suggest that constructs with broad definitions reflect the complexity of students' motivation and may offer more practical applications than the finer-grained conceptual definitions that are often the focus of empirical research. The present study illustrates the promise of iterative processes of research drawing on both approaches. Findings reported here inform the tuning of quantitative measures to detect specific conceptual dimensions of students' motivation (e.g., school relevance and positive life interest), and indicate that further explorations are necessary to describe the domain-specificity of students' lack of motivation for school as well as the processes by which students either lose or gain school-related motivation. At the same time, the open-ended responses from interviews yielded thick descriptions conducive to detecting multifaceted conditions with practical applications for instructional strategies.

For many teachers, participation in the present study likely constituted the first time they had been asked to consciously think through and articulate the nature of their students' motivation for school. Although many accepted the term "apathetic" as appropriate, the suggestion of another term, such as "discouraged" or "demoralized," may also have met with broad acceptance.

Perhaps more compelling than merely offering a new label to the field is the effectiveness of a research strategy driven by an exploration of labels to illuminate areas of convergence in existing conceptualizations and open alternative inroads to educational research and practice. In the case of the present study, the selection of the term "school-related apathy" served as a pivot point for selecting and comparing a set of research-based constructs and eliciting responses from teachers and students that yielded valuable insights. Albeit rather bold, one interpretation of the confluence of these insights is the need for a reconceptualization of students' lack of motivation toward the experiences that constitute formal education.

Specifically, the results reported here suggest a perspective on students' lack of school-related motivation that integrates an apparent contradiction between students' expressed need to see the relevance of education to their present situations and an unwillingness to invest the effort required to reach a summit from which this relevance can be grasped. Students high on research-based indicators of school-related apathy reported elevated levels of boredom proneness and distress. Interview data suggested that students are often bored in the classroom and even refuse to complete many tasks assigned by teachers. A pattern of student frustration at "not getting it," and subsequently "tuning out" was apparent.

Paradoxically, a pedagogical emphasis on “real-world” applications (a.k.a. “authentic tasks”) may have served to distance the activities of school from students’ actual lives. Results from this study overwhelmingly suggested that students and even many teachers conceptualize formal education as job training rather than as a process that fosters an individual to a greater engagement with reality that has value both for living in the present as well as future demands. Consequently, future research is needed to document student and teacher perceptions of the purpose of formal schooling, and relations of those perceptions to pedagogical strategies as well as student achievement and affective outcomes.

The present study also suggests that a long-term trend may be in place, whereby the attention of students has slowly shifted from gaining an understanding of subject matter, to aspiring to competence *per se*, to simply procuring the token that enables entrée into prestigious or high-paying jobs. Consequently, research is in order that examines students’ goals for passing through the hoops of schooling primarily as prerequisites for moving to the next step toward employment.

Findings related to the amotivation construct also bear several implications for future research. Students in the present study overwhelmingly scored low on amotivation, which was operationalized largely in terms of lack of reasons for going to school. In other words, the survey data suggest that the majority of students have reasons for being in school. Interview data, however, told another story: students did have reasons, but very few saw reasons in the present for being in school. At the same time, many students articulated a lack of intention to act. This conceptualization closely parallels the conceptual definition of amotivation. Thus, future work should be conducted to revise the

amotivation measure based on its conceptual definition and informed by the student and teacher comments captured in the present study. Research using a revised amotivation measure could explore the relation between lack of intention to act and personal relevance, as discussed earlier. This research may stand to gain from a revival of the volition construct targeted by earlier scholars (e.g., Corno, 1993).

The amotivation construct also claims to address both students' value for and sense of competence toward an activity. As demonstrated by the body of research on expectancy-value theory, collapsing these two aspects of students' motivation blurs important distinctions. Specifically, amotivation as lack of intention to act may result from lack of value, *or* lack of perceived competence, *or* lack of perceived reasons for investing energy in a task. Future research that disentangles the relations among these issues is warranted.

The success of the hybrid factors in predicting individual differences suggests that potential exists for improved parsimony. Statistical examination of the research-based indicators of school-related apathy pointed to the importance of the relevance of school and a general attitude or interest in life. Similarly, cluster patterns suggested that groups of students manifest general apathy and apathy more narrowly linked to school contexts. Further, interviews with students suggest frustration when they don't understand, yet 'inability' to do the work required to get there. Accordingly, research into context-specific and general manifestations of apathy are called for. Research is also needed on the relation between students' understanding of subject matter and effective strategies for scaffolding students' investment in learning.

With respect to prevalence, the streams of data in the present study converged to document roughly 8% of 8th- and 10th-grade students with manifestations of what could be called school-related apathy. Another, larger, group at each grade level was identified as exhibiting low motivation for school. This group was evident not only in proportions of cluster membership, but also in teacher responses regarding the extent to which motivation poses a problem and proportion of students nominated as apathetic toward school. More research is needed to improve identification of students with school-related apathy and low motivation for school. The findings reported here regarding disparities between research and teacher identifications of such individuals underscores the importance of marshalling evidence from a variety of sources to detect this condition in students.

The use of multiple informants also poses specific challenges to the interpretation of results. The benefit of drawing on a range of players is the opportunity to integrate perspectives and to identify issues that may not be apparent to one or another group of stakeholders. However, there is great potential for mismatch in the assumptions on which responses are based. For instance, teachers may have been operating from a sense of their own expectations for students in terms of engagement, assignments, and school involvement. In contrast, students may be more likely to see school as one among many aspects of their lives. The difference in perspectives thus constitutes one explanation for differences observed between teachers and students as well as between teachers and research measures.

Exploration of the questions addressed in the present study among public school students and teachers reflecting diverse populations is in order. In light of the findings

reported here, research should also target the relation between religious background and religious practice to students' motivation for school. The importance of investigating the subject-matter nature of motivation also bears exploration, as this theme clearly emerged in interviews.

The development of students' motivation represents another area for further research. The cross-sectional design of the investigation reported here suggest that students' general lack of motivation increases over time. Results also suggest that some students transition from moderate apathy to low apathy. Thus identification of pivotal factors in that transition represents an important focus for research. Though logistically challenging, longitudinal studies that follow students from elementary school through college offer great potential for tracing constellations of contextual and individual characteristics that contribute positively to students' motivation for engaging with content as well as preparing themselves for rewarding careers.

The present study also holds implications for research into effective approaches to preservice and inservice programs that equip teachers with tools for identifying and responding to students who lack motivation for school. Development and research of interventions designed to help students critique their own experience represent an important endeavor. Such research could identify strategies that foster students' awareness of the present value of education. This suggestion is akin to affective metacognition: thinking about affect rather than merely living through it.

Finally, a number of methodological implications arise from the present study. Explorations integrating interviews and quantitative data collection methods enable comparisons among similar constructs and refinement of conceptual definitions, and offer

opportunities for new and unforeseen meanings to surface. Nomination methods applied in concert with self-report methods also offer wonderful possibilities for comparing research-based and practitioner understandings of constructs, be they cognitive, motivational, or otherwise. Since nomination patterns can be quantified via multiple algorithms, research into reliable approaches to capturing nominations should be pursued.

The present study yielded insights into the state of students' school-related apathy, and opened new doors through which future research can pass to document and successfully respond to challenges in fostering students' motivation for school. It is hoped that the results and interpretations presented herein may contribute to efforts to increase students' experiences of the rewards—both present and future—that formal schooling offers.

Appendix A

Demographics Measures

Form A-S: Student

Form A-T: Teacher

FORM A-S**ID:**

Directions: Please check off or fill in the appropriate response.

Gender: Male Female

Birth Year: 19____

Ethnicity (check all that apply):

- African American
- American Indian
- Asian/Pacific Islander American
- European American
- Hispanic American
- Other (please specify): _____

What is your religion?

- Roman Catholic
- Episcopalian
- Presbyterian
- Jewish
- Buddhist
- Hindu
- Muslim
- Other _____

How often do you observe your religion?

- often (e.g., weekly)
- sometimes (e.g., about monthly)
- occasionally (e.g., major holidays)
- rarely/never

FORM A-T

ID: _____

Directions: Please check off or fill in the appropriate response.

Gender: Male Female

Birth Year: 19_____

Total Years Teaching Middle- and High-School, including 2006-07: _____

Grade(s) Taught

Indicate whether or not you have taught each grade level by checking “No” or “Yes”. For each grade level you have taught, fill in the number of years you taught that grade. Include the current year in your responses.

		# Years	
PreK - 5	<input type="radio"/> No	<input type="radio"/> Yes	_____
6	<input type="radio"/> No	<input type="radio"/> Yes	_____
7	<input type="radio"/> No	<input type="radio"/> Yes	_____
8	<input type="radio"/> No	<input type="radio"/> Yes	_____
9	<input type="radio"/> No	<input type="radio"/> Yes	_____
10	<input type="radio"/> No	<input type="radio"/> Yes	_____
11	<input type="radio"/> No	<input type="radio"/> Yes	_____
12	<input type="radio"/> No	<input type="radio"/> Yes	_____
Post-Secondary	<input type="radio"/> No	<input type="radio"/> Yes	_____

Ethnicity (check all that apply):

- African American
- American Indian
- Asian/Pacific Islander American
- European American
- Hispanic American
- Other (please specify): _____

What is your religion?

- Roman Catholic
- Episcopalian
- Presbyterian
- Jewish
- Buddhist
- Hindu
- Muslim
- Other: _____

How often do you observe your religion?

- often (e.g., weekly)
- sometimes (e.g., about monthly)
- occasionally (e.g., major holidays)
- rarely/never

Appendix B
Adolescent Apathy

FORM B: Part 1**ID:**

Directions: Rate how much you agree with each of the following statements by circling the appropriate number.

	Strongly Disagree				Strongly Agree
1. I want to go to college.	1	2	3	4	5
2. I have career plans after graduation.	1	2	3	4	5
3. I am good at one or more sports.	1	2	3	4	5
4. I know what I would like to be when I am an adult.	1	2	3	4	5
5. I know which college I would like to attend.	1	2	3	4	5
6. I would rather sleep than go out with my friends.	1	2	3	4	5
7. My friends think I am passive.	1	2	3	4	5
8. I like to argue/debate about the topics which are important to me.	1	2	3	4	5
9. I am an ambitious person.	1	2	3	4	5
10. I don't care if I skip a day of school or a class.	1	2	3	4	5
11. I am a disruptive person.	1	2	3	4	5
12. I am a creative, imaginative person.	1	2	3	4	5
13. I can make a difference in terms of: changing school policies, affecting social and political issues.	1	2	3	4	5
14. I think that I am smart.	1	2	3	4	5
15. I have difficulty making decisions.	1	2	3	4	5
16. I would enjoy being on an athletic team.	1	2	3	4	5
17. I like reading (books, magazines, comics, etc.)	1	2	3	4	5

FORM B: Part 2**ID:**

Directions: Indicate whether or not you participated in each of the following activities *sometime during the last TWO months*. Circle Y for YES and N for NO.

Y N 1. Attended a sporting event (school or professional) as a spectator

Y N 2. Read a novel, play or short story for personal enjoyment

Y N 3. Competed on a sports team or in a personal sporting event

Y N 4. Attended a youth group event, sponsored by a church, temple, community organization, etc.

Y N 5. Participated in a hobby

Y N 6. Went to the movies

Y N 7. Delivered a speech or performed in front of a group

Y N 8. Put a large amount of effort into a school project

Y N 9. Performed some sort of volunteer/charitable service

Y N 10. Wrote or recited long- or short-term goals for myself.

Appendix C
Apathy Evaluation Scale

FORM C**ID:**

Directions: Indicate how true each statement has been for you *over the last 4 weeks* by circling a number on the rating scale.

	Not at all true	Slightly True	Somewhat True	Very True
1. I am interested in things.	1	2	3	4
2. I get things done during the day.	1	2	3	4
3. Getting things started on my own is important to me.	1	2	3	4
4. I am interested in having new experiences.	1	2	3	4
5. I am interested in learning new things.	1	2	3	4
6. I put little effort into anything.	1	2	3	4
7. I approach life with intensity.	1	2	3	4
8. Seeing a job through to the end is important to me.	1	2	3	4
9. I spend time doing things that interest me.	1	2	3	4
10. Someone has to tell me what to do each day.	1	2	3	4
11. I am less concerned about my problems than I should be.	1	2	3	4
12. I have friends.	1	2	3	4
13. Getting together with friends is important to me.	1	2	3	4
14. When something good happens, I get excited.	1	2	3	4
15. I have an accurate understanding of my problems.	1	2	3	4
16. Getting things done during the day is important to me.	1	2	3	4
17. I have initiative.	1	2	3	4
18. I have motivation.	1	2	3	4

Appendix D

Amotivation

FORM D**ID:**

Directions: On a scale of 1 to 5, rate how much you agree with each statement.

Why do you go to school?

	Strongly Disagree		Strongly Agree		
1. Honestly, I don't know; I really feel that I am wasting my time in school.	1	2	3	4	5
2. I once had good reasons for going to school; however, now I wonder whether I should continue.	1	2	3	4	5
3. I can't see why I go to school and frankly, I couldn't care less.	1	2	3	4	5
4. I don't know; I can't understand what I am doing in school.	1	2	3	4	5

Appendix E
Work Avoidance

FORM E**ID:**

Directions: Please rate how much you agree with each of the following statements by circling the appropriate number.

	Strongly Disagree			Strongly Agree	
1. At school, I want to get others to do the work for me.	1	2	3	4	5
2. I wish I didn't have to do schoolwork.	1	2	3	4	5
3. I just want to do enough schoolwork to get by.	1	2	3	4	5
4. At school, I want to do things as easily as possible so I won't have to work very hard.	1	2	3	4	5
5. I want to get out of doing schoolwork.	1	2	3	4	5

Appendix F
Boredom Proneness Survey

FORM F**ID:**

Directions: Please rate whether each of the following statements *generally* describes you by circling True or False.

1. It is easy for me to concentrate on my activities.	True	False
2. Frequently when I am working I find myself worrying about other things.	True	False
3. Time always seems to be passing slowly.	True	False
4. I often find myself at “loose ends,” not knowing what to do.	True	False
5. I am often trapped in situations where I have to do meaningless things.	True	False
6. Having to look at someone’s home movies or travel slides bores me tremendously	True	False
7. I have projects in mind all the time, things to do.	True	False
8. I find it easy to entertain myself.	True	False
9. Many things I have to do are repetitive and monotonous.	True	False
10. It takes more stimulation to get me going than most people.	True	False
11. I get a kick out of most of the things I do.	True	False
12. I am seldom excited about my schoolwork.	True	False
13. In any situation I can usually find something to do or see to keep me interested.	True	False
14. Much of the time I just sit around doing nothing.	True	False
15. I am good at waiting patiently.	True	False
16. I often find myself with nothing to do—time on my hands.	True	False
17. In situations where I have to wait, such as a line or queue, I get very restless.	True	False
18. I often wake up with a new idea.	True	False
19. It would be very hard for me to find a job that is exciting enough.	True	False
20. I would like more challenging things to do in life.	True	False
21. I feel that I am working below my abilities most of the time.	True	False
22. Many people would say that I am a creative or imaginative person.	True	False
23. I have so many interests, I don’t have time to do everything.	True	False
24. Among my friends, I am the one who keeps doing something the longest.	True	False
25. Unless I am doing something exciting, even dangerous, I feel half-dead and dull.	True	False
26. It takes a lot of change and variety to keep me really happy.	True	False
27. It seems that the same things are on television or the movies all the time; it’s getting old.	True	False
28. When I was young, I was often in monotonous and tiresome situations.	True	False

Appendix G
Disengagement

FORM G**ID:**

Directions: For each item, circle the appropriate number on the rating scale.

During the <i>last month</i> , about how often did you:	Never/ almost never	Sometimes (a few times)	Fairly Often (several times)	Quite Often (about daily)
1. Arrive late to school	1	2	3	4
2. Arrive late to class	1	2	3	4
3. Cut class	1	2	3	4
4. Go to class unprepared (without books, notes, pen or pencil)	1	2	3	4
5. Go to class without having completed the homework	1	2	3	4
6. Miss a day of school because of illness	1	2	3	4
7. Miss a day of school for a reason other than illness	1	2	3	4

Appendix H
Distress & Well-Being

FORM H**ID:**

Directions: The purpose of these questions is to understand what you are usually like or what you have usually felt, not just during the past few weeks but *over the past year or more*.

Please read each sentence carefully and select the number that best describes you.

What are you like?

	False	Somewhat False	Not Sure	Somewhat True	True
1. I worry too much about things that aren't important.	1	2	3	4	5
2. I often feel sad or unhappy.	1	2	3	4	5
3. I usually feel I'm the kind of person I want to be	1	2	3	4	5
4. I usually think of myself as a happy person.	1	2	3	4	5
5. I really don't like myself very much.	1	2	3	4	5
6. I get into such a bad mood that I feel like just sitting around and doing nothing.	1	2	3	4	5
7. I feel more nervous or worried about things than I need to.	1	2	3	4	5
8. I feel very happy.	1	2	3	4	5
9. I feel lonely.	1	2	3	4	5
10. I feel nervous or afraid that things won't work out the way I would like them to.	1	2	3	4	5
11. I'm not very sure of myself.	1	2	3	4	5
12. I'm the kind of person who has a lot of fun.	1	2	3	4	5

Appendix I

Curiosity

FORM I**ID:**

Directions: Please read each of the following statements carefully, then circle a number on the scale to indicate how you would *usually* describe yourself.

	Strongly Disagree		Neither Agree nor Disagree			Strongly Agree	
1. I would describe myself as someone who actively seeks as much information as I can in a new situation.	1	2	3	4	5	6	7
2. When I am participating in an activity, I tend to get so involved that I lose track of time.	1	2	3	4	5	6	7
3. I frequently find myself looking for new opportunities to grow as a person (e.g., information, people, resources).	1	2	3	4	5	6	7
4. I am <i>not</i> the type of person who probes deeply into new situations or things.	1	2	3	4	5	6	7
5. When I am actively interested in something, it takes a great deal to interrupt me.	1	2	3	4	5	6	7
6. My friends would describe me as someone who is “extremely intense” when in the middle of doing something.	1	2	3	4	5	6	7
7. Everywhere I go, I am out looking for new things or experiences.	1	2	3	4	5	6	7

Appendix J

Apathy-Level Student Checklist

FORM J**ID:**

Directions: Below is a list of all the students you teach. For each student listed, check “clearly apathetic” if you consider this student to be clearly apathetic with respect to school. If you perceive this student to be clearly NOT apathetic with respect to school, please check “clearly NOT apathetic”. Check “in the middle” if you perceive the student to fall somewhere between these two extremes.

IMPORTANT: To protect student identity, please cut student names off the form before returning it to the researcher. Only study identification numbers will be used to analyze these data.

Name	Clearly apathetic	In the middle	Clearly NOT apathetic	Study ID
Student 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	105
Student 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	102
Student 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	113
Student 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	999
Student 5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	103
Student 6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	106
Student 7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	115
Student 8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	999
Student 9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	112
Student 10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	109

Appendix K
Student Interview Protocol

STUDENT INTERVIEW PROTOCOL

Directions to Interviewer: After student has provided signed parental consent and student assent forms, confirm that it is ok to record the interview. Start tape recorder and indicate ID number and grade level of interviewee but do not use his or her name. Each question must be asked, however you are encouraged to probe responses for more description of the definition, causes, and state of apathy in this student and his or her peers.

- Question 1:**
- a. Outside of school, what things really motivate you? Why do they motivate you? How important is it for you to do well in these things?
 - b. Now, *in school*, are there things you find really motivating? What makes those things motivating? How important is it for you to do well in school?
 - c. You just described things that are motivating or not motivating for you. When you use the word “motivating”, what do you mean? Are there other words that mean the same things as “motivating” for you?

- Question 2:**
- a. How about things in school that are not motivating for you. What are some of those things? Why are those things not motivating?
 - b. When you say “not motivating”, what do you mean? Are there other words you could use for not being motivating?

DEPENDING ON RESPONSE, EITHER:

I noticed you used the word “apathetic”. What does that word mean to you?

OR

Have you heard the word “apathetic”? Do you know what it means?

When you are really motivated, what are you like?

How about when you’re not motivated, what are you like?

- Question 3:** If I asked your friends whether they find school motivating or not motivating, what would they say? Why?

- Question 4:** If I asked your teachers, would *they* say you’re motivated in school, or not? Why? If I asked all your teachers to give you a score from 1 to 5 on your motivation, would they all give me the same number, or would there be differences? Why?

- Question 5:** In our country, you’re required to go to school until you’re 16. What do you think about that?

- Question 6:** What would make school more motivating for students?

Appendix L
Teacher Interview Protocol

TEACHER INTERVIEW PROTOCOL

Directions to Interviewer: After teacher has signed consent form, confirm that it is ok to record the interview. Start tape recorder and indicate ID number and grade level taught by interviewee but do not use his or her name. Each question must be asked, however you are encouraged to probe responses for more description of the definition, causes, and state of apathy in students taught by the interviewee.

Question 1: How would you describe the motivations of your 8th/10th grade students overall?

Question 2:

- a. Does student motivation pose a challenge for teachers?
- b. Compared to other difficulties that face teachers, how serious a problem is student motivation?

Question 3:

- a. Have you heard teachers describe students as apathetic?
- b. Would you characterize any of your students as apathetic?
- c. What is it about those students that tells you they're apathetic?

Question 4: I'm interested in knowing something about students who are motivated or not motivated. Of the students you're teaching now, roughly what percent would you say are highly motivated? What percent are clearly unmotivated?

Question 5:

- a. What do you think contributes to students' lack of motivation for school?
- b. ***IF 'COMPETENCE' NOT INCLUDED IN RESPONSE***
How important do you think it is for students to do well in school? Do you think how well they do has anything to do with their motivation for school?
- c. ***IF 'CARING/VALUING' NOT INCLUDED IN RESPONSE***
Do you think students care about school? Do you think this has anything to do with their motivation?

Question 6: If you were in charge, what would you do to make school more motivating for students?

Appendix M

Informed Consent and Assent Forms

Initials _____

Date _____

PARENTAL CONSENT FORM

- PROJECT TITLE** School-Related Apathy in 8th- and 10th-Grade Students: A Mixed-Method Exploration of Definitions, Construct Independence, Correlates, and Grade-Level Differences
- PURPOSE** This is a research project being conducted by Dr. Patricia Alexander in the Department of Human Development, University of Maryland, College Park. We are inviting your child to participate in this research project because your child is in either the 8th or 10th grade in a Catholic school in the Fall River Diocese.
- The purpose of this investigation is to better understand the development of students' motivation to engage in school-related activities. This study seeks to examine aspects of your child's interest in or apathy toward school-related activities. Findings from this study will help in the design of school activities and instruction that more effectively engage students in school.
- PROCEDURES** There are two parts to this study. In the first session, your child will be asked to complete a packet of questionnaires about his or her general curiosity, boredom proneness, interest in or apathy toward school-related activities, and well-being. This procedure will take place during school in a group setting and will take approximately 30 minutes to complete. The second session will only involve a few randomly-selected students from those who completed the questionnaires. If selected for this process, your child will be interviewed individually about his or her motivation for school activities. The interview will be audiotaped and will last about 15 minutes.
- CONFIDENTIALITY** Participation is voluntary and all responses are confidential. The data your child provides will be grouped with the data of others for reporting and presentation. Your child's name will not be used in the storage or reporting of the information. If your child is selected for an interview, this procedure will involve making digital audio recordings of your child, to record his or her responses to questions about school-related activities. The digital audio files and your child's other data will be stored in a locked cabinet in the office of the student investigator, on the University of Maryland Campus. Access to these data will be limited to the project investigators and research assistants. After five years, the paper and audio data will be either destroyed (shredded or deleted) or boxed and moved to a secure storage facility.

Initials _____
Date _____

RISKS AND BENEFITS

There are no known risks associated with your child’s participation in this research project. This study is not designed to help your child personally, but to help researchers learn more about student motivation for school-related activities.

FREEDOM TO WITHDRAW

Your child’s participation is voluntary, and your child is free to withdraw from this study, to ask questions at any time without penalty and to refuse to answer specific questions.

CONTACT INFORMATION

This project has been reviewed according to The University of Maryland procedures governing participation in research. You are to contact Michelle M. Riconscente (phone: 301/405-1304; email: mricsc@umd.edu, mailing address: Department of Human Development, University of Maryland, College Park, MD 20742) or Patricia A. Alexander (phone: 301/405-2821, email: palexand@umd.edu, mailing address: Department of Human Development, University of Maryland, College Park, MD 20742) with any questions regarding this investigation.

If you have questions about your child’s rights as a research subject or wish to report a research-related injury, you can contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; irb@deans.umd.edu; (301-405-0678)

STATEMENT OF AGE OF SUBJECT AND CONSENT

Your signature indicates that: you are at least 18 years of age or older; you are the parent or legal guardian of a minor whose name is given below; and you give consent for your child to participate in the above research project that is being conducted by Dr. Patricia Alexander in the Department of Human Development, University of Maryland, College Park.

PLEASE CHECK ONE OF THE FOLLOWING:

I give permission for my child to be audiotaped if he or she is selected for an interview for this study

I do not give permission for my child to be audiotaped if he or she is selected for an interview for this study

SIGNATURE AND DATE

Name of Child:

Name of Parent/Legal Guardian:

Signature of Parent/Legal Guardian:

Date:

Initials _____

Date _____

STUDENT ASSENT FORM

- PROJECT TITLE** School-Related Apathy in 8th- and 10th-Grade Students: A Mixed-Method Exploration of Definitions, Construct Independence, Correlates, and Grade-Level Differences
- PURPOSE** This is a research project being conducted by Dr. Patricia Alexander at the University of Maryland, College Park. We are inviting you to participate in this research project because you are a student in the 8th or 10th grade in a Catholic school in the Fall River Diocese. The purpose of this research project is to find out more about students' school-related motivation.
- PROCEDURES** You will be administered a packet of surveys that include questions about your thoughts, feelings, and behaviors related to the time you spend both in school and out of school. The surveys will ask you to rate your agreement with questions like, "When something good happens, I get excited" and "I wish I didn't have to do schoolwork." If you choose to participate in this study, the data you provide from the surveys will be analyzed in relation to each other. The researchers will have access to your GPA at the school you currently attend. You will also be given a demographics sheet to complete including information about gender, age, and race. You may refuse to answer any question.
You may also be selected for a 15-minute interview about school-related motivation. Interviews will be digitally audiotaped and transcribed.
- CONFIDENTIALITY** Participation is voluntary and all responses are confidential. The data you provide will be grouped with the data of others for reporting and presentation. Your name will not be recorded on the audio file or surveys, and will not be used in the reporting of information. Data will be stored in a locked cabinet in the office of the student investigator, on the University of Maryland campus. Access to this data will be limited to the project investigators and research assistants. After five years, the survey data will be shredded or boxed and moved to a secure storage facility, and the audio recordings will be destroyed. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if we are required to do so by law.

Initials _____

Date _____

**RISKS AND
BENEFITS**

There are no known risks associated with participating in this research project. This research is not designed to help you personally, but the results may help the investigators learn more about school-related motivation and ways to improve the experience of students in middle and high school.

**FREEDOM TO
WITHDRAW**

Your participation in this research is completely voluntary. Participation is not required and will not affect your grade. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating, you will not be penalized or lose any benefits for which you otherwise qualify.

**CONTACT
INFORMATION**

You have been informed that this research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects. If you have any questions about the research study itself, please contact Dr. Alexander (palexand@umd.edu; 301-405-2821) or Michelle Riconscente (mriconsc@umd.edu; 301-405-1304) at: EDU 3304F, Department of Human Development, University of Maryland, College Park;

If you have questions about your rights as a research subject or wish to report a research-related injury, you can contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; irb@deans.umd.edu; (301-405-0678)

**STATEMENT OF
AGE OF
PARTICIPANT AND
ASSENT**

Your signature below indicates that: the research has been explained to you; your questions have been fully answered; and you freely and voluntarily choose to participate in this research project.

Please check one of the following:

- I agree** to audiotaped during my participation in this study.
- I do not agree** to be audiotaped during my participation in this study.

SIGNATURE AND DATE

Name of Participant:.....

Signature of Participant:.....

Date:

Initials _____

Date _____

TEACHERS' INFORMED CONSENT FORM

- PROJECT TITLE** School-Related Apathy in 8th- and 10th-Grade Students: A Mixed-Method Exploration of Definitions, Construct Independence, Correlates, and Grade-Level Differences
- PURPOSE** This is a research project being conducted by Dr. Patricia Alexander at the University of Maryland, College Park. We are inviting you to participate in this research project because you teach students in the 8th or 10th grade in a Catholic school in the Fall River Diocese. The purpose of this research project is to find out more about students' school-related motivation.
- PROCEDURES** You will complete a short demographics form and a student apathetic/non-apathetic checklist. You will then be individually interviewed for 30 minutes at your school. The interview includes questions like, "Would you characterize some of your students as apathetic?" and "What do you think can be done to improve student motivation for school?" Your interview will be digitally audiotaped and transcribed.
- CONFIDENTIALITY** Participation is voluntary and all responses are confidential. The data you provide will be grouped with the data of others for reporting and presentation. Your name will not be used in the storage or reporting of information. Data will be stored in a locked cabinet in the office of the student investigator, on the University of Maryland campus. Access to this data will be limited to the project investigators and research assistants. After five years, the data will be shredded or boxed and moved to a secure storage facility. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if we are required to do so by law.
- RISKS AND BENEFITS** There are no known risks associated with participating in this research project. The results from this study may help the investigators learn more about school-related motivation and ways to improve the experience of students in middle and high school. So that you may personally benefit from participation in this study, you will be invited to a round-table discussion at the conclusion of the study in which the results are presented and your feedback is sought to better understand these results. In addition, recommendations for classroom practice based on the study results will be shared and discussed.

Initials _____

Date _____

FREEDOM TO WITHDRAW

Your participation in this research is completely voluntary. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits for which you otherwise qualify.

CONTACT INFORMATION

You have been informed that this research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects. If you have any questions about the research study itself, you can contact Dr. Alexander (palexand@umd.edu; 301-405-2821) or Michelle Riconscente (mriconscent@umd.edu; 301-405-1304) at: EDU 3304F, Department of Human Development, University of Maryland, College Park;

If you have questions about your rights as a research subject or wish to report a research-related injury, you can contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; irb@deans.umd.edu; (301-405-0678)

Statement of Age of Subject and Consent

Your signature below indicates that: You are at least 18 years of age; the research has been explained to you; your questions have been fully answered; and you freely and voluntarily choose to participate in this research project.

Please check one of the following:

- I agree** to audiotaped during my participation in this study.
- I do not agree** to be audiotaped during my participation in this study.

SIGNATURE AND DATE

Name of Participant:.....

Signature of Participant:.....

Date:

APPENDIX N: Rotated Component Matrix for Hybrid Factor PCA

Item	Components					Item	Components	
	1	2	Item (con'd)	1 (con'd)	2 (con'd)		1	2
B1	-0.36	0.03	D1	0.72	-0.09	B4	0.01	0.40
B2	-0.14	0.39	D2	0.61	-0.08	B10	-0.52	0.18
B3	0.06	0.20	D3	0.79	-0.04	B13	-0.20	0.49
B4	0.03	0.45	D4	0.73	-0.02	B14	-0.39	0.41
B5	-0.04	0.28	E1	0.47	-0.35	C1	-0.06	0.60
B6	0.06	0.08	E2	0.55	-0.23	C2	-0.32	0.50
B8	-0.02	0.27	E3	0.55	-0.33	C3	-0.36	0.58
B9	-0.22	0.39	E4	0.61	-0.20	C4	0.01	0.67
B10	-0.47	0.19	E5	0.65	-0.26	C5	0.23	-0.65
B11	0.39	-0.10	G1	0.19	-0.02	C7	0.02	0.59
B12	-0.05	0.29	G2	0.20	-0.18	C8	-0.25	0.49
B13	-0.17	0.47	G3	0.05	-0.03	C9	-0.11	0.55
B14	-0.40	0.36	G4	0.30	-0.09	C16	-0.44	0.60
B15	-0.06	0.14	G5	0.48	-0.10	C18	-0.29	0.60
B16	0.00	0.25	G6	0.11	0.07	D1	0.75	-0.12
B17	-0.26	0.22	G7	0.08	0.03	D2	0.65	-0.08
B18	-0.15	0.35				D3	0.79	-0.07
C1	-0.11	0.47				D4	0.76	-0.04
C2	-0.32	0.44				E1	0.53	-0.35
C3	-0.39	0.51				E2	0.66	-0.13
C4	-0.06	0.52				E3	0.63	-0.31
C5	0.26	-0.54				E4	0.68	-0.21
C6	0.31	-0.18				E5	0.73	-0.23
C7	-0.06	0.47				G5	0.52	-0.06
C8	-0.29	0.43						
C9	-0.17	0.42						
C10	-0.35	0.16						
C11	-0.36	0.18						
C12	-0.19	-0.03						
C13	0.00	0.02						
C14	-0.16	0.15						
C15	-0.21	0.35						
C16	-0.44	0.56						
C18	-0.38	0.52						

Note. Items and loadings in the initial PCA with varimax rotation are displayed in the 2 left sets of columns. Bolded items were retained. The set of columns on the right show loadings from PCA with varimax rotation on the retained items. All items except C16 were retained for the final hybrid factors shown in Table 26.

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