

Adolescent Identity and the Transition to Young Adulthood:
Integrating Theories, Methods, and Evidence

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ABSTRACT

KYLE CLAYTON LONGEST: Adolescent Identity and the Transition to Young Adulthood:
Integrating Theories, Methods, and Evidence
(Under the Direction of Michael J. Shanahan)

This research integrates several social psychological theories and the life course paradigm to address how adolescents construct and manage their identity in the transition to young adulthood. The larger goals are to inform the study of adolescent identity by drawing upon sociological perspectives of identity and to enhance these same perspectives through insights gleaned from the study of adolescents. To accomplish this objective, three distinct analytic projects are undertaken. The first of these projects proposes a theoretical incorporation of the life course paradigm into identity theory. The analyses assess this integration by investigating adolescent religious identity, focusing on how this identity is maintained through major life transitions, such as a parental divorce or leaving the parents home. The findings suggest that identity theory is a valid theory of adolescent identity, but the connections between its primary mechanisms alter when adolescents make a significant step towards adulthood. The second project extends the investigation of change and stability in adolescent identity by analyzing adolescent social type identities (e.g., Jock or Nerd). This study examines the degree of change in these identities, as well as comparing the influence of ascribed versus achieved factors' influence on each potential identity alteration. Collectively the results indicate about half of all adolescents change identities over a one year period, and achieved factors play a more significant role than ascribed characteristics in determining the likelihood that adolescents assume particular identities. Unique combinations of these two

types of factors, however, produce multiple pathways that consistently lead adolescents into the Normal identity. The final project focuses on understanding how adolescent identities may impact young adult trajectories. Specifically, this project investigates how the status of adolescent identities may contribute to substance use and role instability in young adulthood. The results show that popular adolescents are more likely than low status adolescents to binge drink and suffer from academic and employment role instability in young adulthood. Collectively, these projects enhance the understanding of how identities are managed, maintained, and abandoned over the life course.

To Paige

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CHAPTER 1

FRAMEWORK, MOTIVATIONS, AND OBJECTIVES

INTRODUCTION

One of the central processes in the transition from adolescence to young adulthood is the management of one's identity. As adolescents move from high school to full-time work or tertiary schooling and as they establish their independent households, they are faced with changing social situations that may prompt changes in their identity. Quite often this process has been explained as an individual, internal struggle (see Erikson 1968, Arnett 2004). My program of research, however, seeks to incorporate sociological theories and methods to provide insights into the social circumstances that shape the stability and change of adolescent identity in the transition to young adulthood.

This dissertation addresses three notable limitations to existing research. First, most studies of adolescent identity do not use sociologically informed frameworks to examine the identity process. Second, the factors that explain why adolescents change from one particular identity to another are not well understood. Finally, the impact that adolescent identity status has on young adult outcomes, such as maintaining employment or progressing in post-secondary education, have not been adequately studied.

To alleviate to these limitations, I conduct three distinct analytic projects, each of which uses novel data and methods. The principals of the life course paradigm, integrated with social psychological theory, unifies these studies. The life course framework provides the over-arching basis for this dissertation and also helps the collective results speak to

broader questions of how identity operates over time. Thus, before providing a description of each analytic project I outline the general motivations and framework of this dissertation. I first describe the key concepts of the life course that are used in this study. Next, I explain the limitations of prior research. And finally, I detail how the results of this study are of importance to other fields of sociology.

THE LIFE COURSE PARADIGM

The life course provides a “cohesive set of concepts, principles, ideas, and methods” (Shanahan and Macmillan 2007, 46) that guide research questions and empirical investigations. The overarching goal of life course studies is to understand the intersection of social structure and human biography over time. The life course paradigm is guided by six specific principles: historical time and place, situational imperatives, linked lives, agency, life-stage, and accentuation (Shanahan and Macmillan 2007). Although all six are used to some degree, I primarily focus on situational imperatives, linked lives, and accentuation.

Situational imperatives refer to the idea that an individual’s behavior is constrained by the opportunities and limitations that exist in given situations. This principle explicitly recognizes that there are structural factors that influence the choices and courses of action available to individuals. The life course paradigm stresses that these factors are tied significantly to age-graded roles and events. For example, one of the key situational imperatives in adolescent identity development is the highly regimented schedule of individuals under the age of 18. In the United States, adolescents are required to be in school for eight hours a day, five days a week. Even the limited amount of “free time” left after formal schooling has constraints: the number of hours in paid employment is regulated by most state laws, participation in extracurricular activities is restricted to particular times and

days, and many cities have curfews prohibiting adolescents to be out of the house after a certain hour. Beyond time use, the educational system also, in part, defines adolescents' available social networks. Adolescents cannot decide which school they attend and must choose their interpersonal ties out of the pool available within their assigned school (or from the neighborhood in which their parents decide, or have, to live). And finally, adolescents have limited control over their economic status. An adolescents' social class is by in large their parents' class.

Adolescent identities must be created and maintained within these types of boundaries. Of course adult identities are accomplished within particular situational imperatives as well, but directly recognizing the unique imperatives of the adolescent social situation leads to distinct questions and hypotheses. For example, knowing that adolescents have relatively less choice than adults in deciding who comprises their social networks may have important consequences for how these networks influence their identity. Recognizing that adolescents have little control over their socioeconomic status may direct attention to other characteristics and behaviors that adolescents may use in defining status, which in turn could be important for the development and consequences of adolescent identity.

The principle of linked lives emphasizes that "the effects of social change on a person's life greatly depend on his or her network of interpersonal relationships" (Shanahan and Macmillan 2007, 50). In a distinct move away from psychological theories of human development, the life course paradigm asserts that peoples' personality, behavior, and well-being are impacted by the ties they have with others. The prediction that peers are important in shaping adolescent identities is not in itself novel. But the life course stresses that a crucial aspect of development is how these ties operate over time and across life transitions. This

understanding directs attention to how the transitions adolescents experience impact the connection between adolescent networks and identity. For example, Styker's (1968) theory of identity claims that having many friends who are involved in religious activities leads to a stronger religious identity. Integrating this theory into a life course paradigm pushes the investigation to understand how an adolescent's religious identity would be impacted if her family moved to a new school district or if she moved away from home to attend college. Are the previous ties maintained along with the religious identity? Are connections made to new but similar peers in the new situation? Is a new identity formed, and another lost, when one enters a new social network? The answers to these questions will enhance identity theory as well as increase the understanding of the adolescent identity process.

Accentuation is the process by which a transition into a new situation heightens previous personality traits or behaviors. Changes in social situations generally are selective, such that everyone does not have the same probability of experiencing any given life transition. Often the factors that increase (or decrease) the likelihood of going through a particular change can become amplified by the transition itself. This principle emphasizes that any particular stage in the life course cannot be understood apart from previous stages.

The process of accentuation calls into question the prominent perception that adolescence is a time for "trying on" various identities, but that eventually individuals settle on their true identity in adulthood (for example Erikson 1968). This conceptualization of identity cuts off the adolescent identity process from adult identity, as if the two were not connected and could be studied separately. The life course paradigm forces researchers to understand the dynamic connection between adolescent and adult identities, specifically how transitions can accentuate (or potentially challenge) traits and behaviors associated with pre-

transition identities. Following this principle, this dissertation directly examines how adolescent religious identity connects to young adult religious identity, focusing special attention on differences created by the types of transitions adolescents encounter when exiting high school (e.g., moving out of the parents' home versus continuing to live with parents). Additionally, the analyses examine if identity status is related to prosocial outcomes (i.e., academic achievement and low deviance) in adolescence, and if these positive paths are accentuated in the transition out of high school.

This description is not meant to review all of the aspects of the life course paradigm that I draw upon throughout this project. Indeed several other tenets are highlighted in the discussion of the literature shaping the research objectives. But these three principles form the framework within which this dissertation's objectives are formulated. The following projects explicitly address situational imperatives, account for linked lives, and understand the accentuation process, which leads to novel questions concerning adolescent identity and provides a basis for the integration of existing theories, methods, and evidence.

OVERARCHING MOTIVATIONS

Theory and Adolescent Identity

The first motivation of this dissertation is to provide a theoretical integration between identity theory and life course principles *and* provide an empirical test of that incorporation. Several studies on adolescence have focused on describing the types of identities that adolescents assume and, to a limited extent, how these identities are defined (e.g., Brown 1990; Kinney 1999; Stone and Brown 1999). This research typically has examined the types of groups (or "crowds") present in adolescent society (e.g., jocks, burnouts, and headbangers). Although these "social type" identities are important, they are inconsistent

with more common conceptualizations of identity in adulthood, which usually are thought to be based in structural locations, roles, or social groups such as lawyer, mother, or Catholic. To date there have been few studies that have directly applied identity theory to these types of identities in adolescence.

One potential reason for this lack of research may be that beyond social type identities, adolescent identities are viewed as being relatively uniform (i.e., child, student, sibling). This perception oversimplifies adolescent life and discounts the similarities between adults and adolescents. Just as all doctors do not have a similar “doctor” identity, so too all adolescents may not have a similar “student” or “religious” identity. There are reasons to believe, however, that the process contributing to inter-individual differences within identities may not be the same for adolescents and adults. Using identity theory to examine adolescent identities provides a common basis with which to evaluate these potential discrepancies.

The second factor limiting the application of identity theory to adolescence is the dominance of psychological explanations of adolescent identity development. Specifically, Erikson’s (1968) theory of identity crisis often is accepted as “the theory” of adolescent identity. Erikson describes human development as consisting of a series of delineated, universal stages. The passage through each stage is met with a crisis, the resolution of which leads the individual to the subsequent stage. One of the key crises occurs at the end of adolescence, when the individual must settle on an identity. Erikson explains that this progression is a “natural” part of human development and is resolved through an internal struggle. Accepting this model as the standard conceptualization of adolescent identity rejects the importance of the social mechanisms that have been shown to significantly shape adult

identities (e.g., Stryker and Serpe 1982). There is limited empirical (or theoretical) basis to believe that these forces become influential only in adulthood. A test of the identity theory model with adolescents, therefore, will help clarify (and enhance) the role of social factors in adolescent identity development.

Not only has this lack of research prevented the development of theoretically-informed models of adolescent identity, but it also may have prevented beneficial refinements of identity theory stemming from the examination of different age groups across the life course. Most importantly, not using identity theory in studies of adolescents has stifled the integration of the life course paradigm with identity theory. Specifically, identity theory has not adequately dealt with the influence of life transitions on identity change and stability. Transitions are life “changes in status that are discrete and bounded in duration, although the consequences may be long term” (George 1993, 358). Examples include moving, entering high school, entering the paid labor force, and getting married. Transitions can impact many of the mechanisms that identity theory posits maintain a given identity, including social networks, opportunities for identity related behavior, and involvement in other roles.

Adolescence is a particularly useful time to examine identities across transitions because not only are adolescents likely to experience several potentially socially dislocating transitions, but many of these transitions can be anticipated (e.g., going to college), making it easier to measure antecedent characteristics and behaviors. Moreover, a pressing question for identity theory is whether a person’s identity leads to behavior that then reinforces that identity (i.e., robust to situational changes). Or is identity more context-dependent such that shifts in social location have a dramatic impact on a person’s identity and subsequent

behavior? Of course, both propositions may be true to some degree. Addressing these issues is not only useful in understanding adolescents but also speaks to adult issues of identity maintenance through major role transitions, such as losing a spouse, children leaving home, retirement.

Adolescent Identity Change

The second motivation for this study also stems from the lack of understanding of identity maintenance and change over time. As opposed to role-based identities, however, here I am concerned with the social type identities that most previous studies of adolescence have examined. Shifting the focus from role identities to social type identities hinders a direct application of identity theory because its predictions are built on the assumption that one's identity is connected to a social position or role. Social types, however, are "consensual concepts of roles that have not been fully codified and rationalized, which help us find our way about in the social structure" (Klapp 1958, 674). Klapp provides examples such as a "good Joe," "tightwad," or "eager beaver." These social types are very similar to common adolescent identities such as "Goths," "nerds," or "skaters" in that they are constructed categories used to place people in a social system (in this case high school). Because the nature of these identities are different from role-based identities, the mechanisms associated with change in these identities are not well understood.

Erikson's theory of adolescent identity holds that adolescents are able to "try on" numerous different identities. According to this viewpoint, adolescent identities are temporary and can be changed if the individual so desires. This perspective minimizes the importance of adolescent identities, as well as constrains the means of identity change to be almost entirely psychological in nature (i.e., taking on a new identity comes from a change in

desires or tastes). This view therefore discards the importance of social influences in identity change.

Yet, most studies of adolescent social type identities have shown that membership in these “crowds” can be quite restrictive (i.e., limiting voluntary change) and is, in part, dependent upon social factors beyond the individual’s control. For example, Eder (1995) found that among junior high students, the identity of “jock” was directly tied to being a good athlete. Adolescents most likely could not try on this identity because doing so would require an intense amount of time and effort to achieve the necessary athletic skill level. Certainly, aspects of particular identities could be achieved more easily than others. For example, an adolescent could be perceived by peers as a “Goth” by simply wearing the right clothes. Milner (2004), however, has shown that taking on most adolescent identities usually requires the individual to fulfill a highly complex combination of traits and behaviors. Thus, there is reason to believe that adolescents cannot try on multiple identities with ease and that changes in identity are not solely the product of internal struggles of self-definition.

Sociological studies that have attempted to explain why adolescents assume particular social type identities, however, have not satisfactorily resolved the problems introduced by Erikson. Often this research explains the process of identity change in terms of social-structural factors, primarily family socio-economic standing (e.g., Eckert 1989). According to this perspective, the definition of adolescent identities is based on stable, ascribed factors. This viewpoint minimizes the impact of achieved factors (e.g., academic achievement or substance use) in leading to changes in adolescent social type identities.

Although it has overcome the ontogenetic problems of Erikson’s theory pointed out by Dannefer (1984), this structural perspective does not account for the life course

conceptualization of agency. The term agency carries a multitude of meanings but from a life course perspective it refers to individuals' purposive decisions made based on their unique situational imperatives. Structural factors may shape the available choices and opportunities, but people actively make their own life course. Extending the example of becoming a jock, an adolescent could work extremely hard to earn a place on the "right" athletic teams and take on the identity of a jock. But the life course paradigm focuses research on recognizing and understanding how structural factors differentially influence individuals' likelihood of achieving this objective. A student from a wealthy family may be more likely to become a jock because she can afford to go to specialized sports camps and has time to devote to athletics (i.e., does not have to work to help support the family). In line with this life course principle, I seek to understand how both ascribed (i.e., age and family socioeconomic status) and achieved (i.e., academic achievement, extracurricular participation, and deviant behavior) factors produce social type identity changes.

Identity Status and Its Consequences

The final motivation for this project comes from the incomplete understanding of how adolescent identities may be related to contemporaneous and future outcomes. Often the study of adolescent identity's impact is posited in terms of the relationship between identity status and outcomes (e.g., substance use and academic achievement). Further, research generally assumes that high status adolescents have a greater likelihood of success, academically and socially, than adolescents with low status identities.

Life course studies have examined how patterns of behaviors and attitudes that are developed in adolescence can impact success in later life. Perhaps the quintessential study of this kind is Sampson and Laub's (1993) reexamination of the Glueck data. Using a large

sample of adolescent criminal offenders, Sampson and Laub investigated how transitions in late adolescence and young adulthood influenced which pathway the individual followed later in life. Specifically, they found that adolescents who experienced life changes that brought them into a pro-social network (e.g., marriage or fatherhood) were less likely to continue their criminal behavior than those who did not undergo similar transitions. Other studies have similarly examined the Great Depression (Elder [1974] 1999), victimization (Macmillan and Hagan 2004), and work (Mortimer 2003), all illustrating how pathways developed in adolescence influence adult outcomes.

Noticeably, most of these studies have studied desistance from detrimental behaviors, rarely examining how positive experiences in adolescence may impact future opportunities and success. This oversight most likely stems from a common understanding among life course theorists of reciprocal continuity. As Caspi (1987) explains, this concept holds that the life course is structured such that individuals' personality and behaviors inherently guide them into institutions and networks that support and strengthen these preexisting and/or socialized traits. These structures in turn maintain and reinforce the antecedent behaviors (i.e., accentuation). Thus, research assumes that if an individual is generally successful in adolescence, he/she is likely to be sorted into activities and institutions that support these positive traits, thereby leading to later life success. In contrast, adolescents who have negative temperaments and tendencies must undergo a significant life change to break out of their negative trajectory.

Not surprisingly, therefore, current research has assumed that adolescents with high status identities are more likely to achieve academically and avoid deviant behaviors than are adolescents with low status identities. This relationship, however, has not been adequately

studied, especially in the transition to young adulthood. According to the accentuation principle and reciprocal continuity, one would expect that adolescent status differentials extend into young adulthood, perhaps even becoming more dramatic. The life course paradigm describes another concept, however, that provides reason to question this prediction.

Turning points are more momentous than life transitions, defined as movements into new environments that entail significant alterations of the life course. Generally, turning points are posited as involving an objective and subjective “knifing-off” from a prior trajectory of behavior. For example, Elder, Shanahan and Clipp (1994) showed how military service during World War II provided a significant turning point for many young men who had suffered through the Great Depression. Along with the assistance of the GI Bill, these men were able to exit their previous working class environments and move into middle and upper class lifestyles.

The question is whether moving out of high school is a turning point and, if so, how this knifing-off processes impacts the relationship between adolescent identity status and life outcomes (e.g., employment, education attainment, and substance use). If the end of high school is a turning point, then adolescent status differentials may cease to have any impact in young adulthood. Or this turning point could enhance the positive trajectories of high status adolescents as they move into young adulthood. This study also examines a third possibility: the end of high school is a turning point *but* it actually creates difficulties for high status adolescents’ role stability and substance use in young adulthood.

An inherent difficulty in empirically studying these questions is the endogeneity between factors that may lead to adolescent identity status and the outcomes of interest (e.g.,

deviance and role stability). For example, high parental socioeconomic status has been shown to increase adolescents' status (Eder 1995) and their academic and occupation attainment (Blau and Duncan 1967). Therefore, any influence of adolescent status on academic trajectories could be due to its endogenous relationship with parental socioeconomic status.

Propensity score matching is an analytic technique that is designed specifically to handle such potentially problematic relationships. This strategy, which will be discussed in more detail below, creates an analytic quasi-experiment to isolate the independent influence of a "treatment" effect, such as holding a high status identity in high school. Thus, this study's employment of adequate methods and data to address the presented questions helps evaluate what to date has been taken primarily as the accepted truth (i.e., high status identities lead to more positive outcomes than low status identities).

SUMMARY OF ANALYTIC PROJECTS

Chapter 2 investigates the validity of identity theory in adolescence and through major life transitions, such as going to college or moving into full time employment. The strong theoretical basis of identity theory helps systematize the understanding of adolescent identities and testing this theory with adolescents furthers incorporates timing and change into the theory's assumptions and predictions. Chapter 3 extends these themes by more thoroughly analyzing the degree of identity alterations and the antecedents of specific identity changes in high school. In doing so, Chapter 3 addresses the stability and the achieved versus ascribed nature of adolescent social type identities. Finally, Chapter 4 examines how adolescent identity may contribute to outcomes in young adulthood. Specifically, this project systematically and rigorously investigates how high and low status identities in high school may lead to more or less successful trajectories in young adulthood.

CONTRIBUTIONS TO OTHER FIELDS

Although the primary aim of this study is to expand and refine the understanding of adolescent identities over time, making this dissertation most directly applicable to life course and adolescent research, it contributes to other areas of sociology as well.

Theoretically, this study integrates several prominent social psychological theories into the life course paradigm. This dissertation focuses on how this integration applies to identity, but the analyses provide useful insights into how these fields can be incorporated in other substantive areas as well. In addition to identity theory, the other projects incorporate mechanisms derived from social psychological theories including status characteristics theory, self-handicapping, and impression management with the life course perspective. Overall, this dissertation illustrates the utility of joining these two frameworks.

Methodologically, I use a diverse set of quantitative methods to address the substantive questions of the study. Each project uses longitudinal data to address the problem of selection that is inherent in studies of identity. A study that analyzes the precursors of a given identity (e.g., religious identity) with data from only one point in time would be unable to distinguish whether the posited predictors led to a change in identity or if a change in identity produced influenced the predictors. All of the projects in this study contain two waves of data. The analyses, therefore, control for the initial level of the outcome (e.g., identity), which allows for a more clear determination of the order of influence.

Further, I incorporate new methods as supplements to regression analyses. Qualitative Comparative Analysis (QCA) shows how characteristics and behaviors can combine to produce particular identity changes. Instead of examining how predictors operate net of each other, QCA focuses on how specific configurations of predictors lead to a given outcome.

Additionally, QCA seeks to understand which of the combinations are *sufficient* to produce the outcome, which implicitly allows for multiple pathways to lead to a similar outcome (i.e., equifinality). This technique, therefore, permits highly complex solutions and may lead to the discovery of (theoretically) unexpected results.

Propensity score matching helps overcome endogeneity issues in testing the relationship between identity status and particular outcomes. This analytic technique is designed to accurately identify the influence of belonging to a “treatment” group. Using a two step process, propensity score matching is able to remove potential bias associated with the predictors leading to being in the treatment as well as the outcome. In this manner, propensity score matching can isolate the unique impact of being in the treatment group. Together these analytic projects demonstrate the benefit of a multifaceted analytic strategy.

Substantively, these projects provide valuable insights relevant to the sociology of religion and education. The application of identity theory in Chapter 2 is made in terms of adolescents’ religious identity. Applying an overarching theory to a model of adolescent religious identity can systematize a broad literature on the factors associated with different levels of religiosity in adolescence and young adulthood. The remaining chapters speak directly to the influence of school on adolescent identity. Chapter 3 demonstrates how the opportunities offered by schools may conjoin with student characteristics to influence membership in specific groups. Additionally, Chapter 4 disentangles the impact of identity hierarchies on academic achievement. This study also provides a picture of how the status of adolescent identities, shaped in part by the nature of schools, have enduring consequences for post-secondary education.

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CHAPTER 2

INTEGRATING IDENTITY THEORY AND THE LIFE COURSE PERSPECTIVE: THE CASE OF ADOLESCENT RELIGIOUS BEHAVIOR

ABSTRACT

Managing one's identity across time and through major life changes is a key process in the life course. Yet, prominent theories of identity have not been adequately tested across age groups and through life transitions. Using longitudinal data from the National Study of Youth and Religion (N = 3,290), the basic hypotheses of identity theory are confirmed in explaining adolescents' religious identity: strong ties to religious parents increase religious salience, which in turn leads to greater participation in religious activities two years later. The connections between these mechanisms, however, are modified based on adolescents' age and whether they move out of the parent's home after leaving high school. Specifically, the religious identity relevant behavior of older youth and adolescents who establish an independent household is influenced more by religious salience than by ties to religious parents or peers. In contrast, for younger adolescents and adolescents who continue to live with a parent after leaving high school, previous ties to religious parents and peers are the most influential predictors of future religious identity behavior. These results speak to the value of integrating the life course perspective with theories of identity.

INTRODUCTION

One of the central challenges a person faces when moving through life is the management of his/her identity. Although sociological perspectives on identity have led to

many useful insights concerning adult roles, preferences, and behaviors, they rarely have been applied to the study of identities embedded in the life course. This paper focuses on identity theory (Stryker 1968), which has proven useful in specifying the factors that influence individual identities but has not fully considered identity as reflecting age-graded experiences and role transitions, which represent continuous and discrete sources of social change in the life course.

Serpe (1987) began the investigation of the identity theory model through life transitions with his study of identity among first year college students. This study sought to understand how the transition to college influenced the connection between identity theory's proposed mechanisms. The findings suggest that when entering college students find activities and accompanying ties to others that support their identity. For example, he found that over the course of their first semester in college, students who established more friends through extracurricular activities were more likely to enact their extracurricular identity than other possible identities such as student or athlete. This study, however, is limited by the lack of pre-transition measures and the exclusion of adolescents who did not make the transition to college. Thus, differences in the type and strength of adolescents' identities before the transition to college could not be examined. Furthermore, by not including adolescents who did not make the transition to college, this study was unable to fully determine the impact of this specific transition on the maintenance or abandonment of given identities.

This study seeks to accomplish two primary objectives in an effort to build upon this previous research. First, it integrates insights from the life course paradigm with identity theory. Situating identity theory within a life course paradigm allows for a more nuanced and dynamic picture of identity, as well as helping clarify the mechanisms associated with both

identity stability and change. The life course paradigm emphasizes that the connection between social structure and human biography is shaped through the imperatives of age-graded trajectories and is impacted by the transitions (i.e., role entries and exits) that people experience within these trajectories (Shanahan and Macmillan 2007). Thus, a life course paradigm directs attention to how the connections between the mechanisms proposed by identity theory may be altered by the unique constraints and opportunities encountered at different ages and by the experience of role transitions, such as getting married or going to college.

Second, this study tests hypotheses resulting from this conceptual integration by examining adolescents' identity in the transition to young adulthood. Adolescents provide a useful test case for these hypotheses because even within adolescence different age groups encounter distinctive sets of norms and expectations. Additionally, adolescents are likely to go through several socially-dislocating transitions (e.g., parental divorce or moving out of the parents' home). A focus on adolescence enhances the understanding of youth and their development, as well as suggesting new ways of conceptualizing adult issues of identity maintenance and change at different ages (e.g., midlife versus post-retirement) and through major role transitions (e.g., divorce, having a child, losing a job).

To address these themes, this study examines adolescents' religious identity. Identity theory presumes that identities are based on roles, defined as a set of expectations attached to a particular social position (Merton 1957). Many common adolescent identities (e.g., jock, burnout, skater), however, are more similar to "social type" identities (Klapp 1958), meaning that they are not fully codified, as are role identities. Religion satisfies the scope conditions for a role identity because it is attached to a reasonably stable, universal set of expectations.

Religious identity thus provides a useful test of identity theory and produces results that are directly comparable to adult studies of identity theory that have also considered religious roles (e.g., Stryker and Serpe 1982). In addition to the theoretical leverage it provides, adolescent religious identity is an important substantive topic in its own right. Understanding the connections between the mechanisms outlined by identity theory and religion adds to the growing research on the religious lives of adolescents (see e.g., Smith and Denton 2005).

Using a longitudinal, nationally representative sample from the National Study of Youth and Religion (NSYR) (N = 3,290), this study uses identity theory to investigate adolescents' religious identity over time and through important life course transitions. To date, most examinations of identity theory have relied on small, local samples (e.g., Serpe 1987). The utilization of a large, nationally representative data set enhances the generalizability of the findings. Most previous studies also have been cross-sectional and the ones that have used longitudinal data do not cover enough time to examine identities across significant life transitions (e.g., McFarland and Pals 2005). The two waves of NSYR cover five years and span the ages when adolescents typically leave high school and establish their own households.¹

Identity Theory and Adolescent Religious Behavior

Identity theory contends that stronger commitment to an identity increases the salience of that identity thereby making the individual more likely to engage in identity-consistent behavior (Stryker 1968; Stryker and Serpe 1982). Identity therefore is indicated by the amount of time people spend performing a role's associated activities. This definition is different than some conceptualizations of identity. For example, religious identity often is measured with a self-report of religiosity or one's denomination. Identity theory, however, is

concerned with explaining why individuals act in accordance with one role in light of the multiple roles they may fill, making identity relevant behavior a meaningful outcome.

In addition to behavior, the other two key concepts of the identity theory model are commitment and salience. Stryker (1968) defines commitment as the number and affective importance of network ties that depend upon a person enacting a given identity. A higher level of commitment leads to that identity being higher in a person's salience hierarchy and increases the frequency of identity-related behavior. Salience is defined behaviorally, as the likelihood of an identity being enacted across situations. Stryker and Serpe (1994) explain that salience operates like a cognitive schema: when an identity has high salience, the individual is likely to interpret situations according to the established norms of the identity and therefore use the identity in guiding his or her actions.

According to identity theory, then, a larger, affectively important religious network (i.e., commitment) should increase adolescents' religious salience (Hypothesis 1) and time spent in religious activities (Hypothesis 2). Adolescents who are most likely to use religion when making decisions (i.e., religion has a high salience) spend the most time in religious activities (Hypothesis 3). Further, salience should mediate the direct relationship between commitment and behavior, such that adolescents with stronger religious identity commitment should have a high religious salience, which in turn increases their level of religious behavior (Hypothesis 4).²

Although not explicitly testing identity theory or using exact measures of its key components, several studies provide support for its mechanisms in terms of adolescents' religious identity. For example, in a longitudinal study of 13 to 18 year-olds, Regnerus and Uecker (2006) found that the more often parents went to religious services, rated religion as

important, and reported better family satisfaction (commitment), the more likely their children were to go to religious services (identity behavior) (see also King, Elder and Whitbeck [1997] and Smith and Denton [2005]). These studies, however, did not examine the impact of any measure resembling salience and did not analyze the relationship between religious importance (or salience) and religious behaviors, as these concepts often are treated as separate outcomes or components of a single underlying factor (Miller and Stark 2002; Regnerus and Smith 2005; Wallace et al. 2003).

Identity theory recognizes that factors in addition to commitment, salience, and importance also may influence religious salience and behavior. Any particular identity salience must operate within a hierarchy of other identities, meaning that holding multiple identities inherently lowers the absolute level that any particular salience can obtain. Additionally, certain individual characteristics may directly make individuals more likely to participate in religious activities. In a review of three national, longitudinal surveys, Smith and his colleagues (2002) found significant drops in reported levels of church attendance and youth group participation as adolescents moved from the 8th to 12th grade. Most studies also have found higher reports of attendance and levels of religious importance among females and African Americans (Johnston et al. 1999; Kieren and Munro 1987; Miller and Hoffman 1995). Finally, Smith and his colleagues (2002) showed that more conservative denominations (e.g., Mormons and Pentecostals) have the highest rates of church attendance, followed by adolescents in mainline groups (e.g., Catholics and Presbyterians) and then adolescents in smaller denominations (e.g., Jewish, Buddhist, Muslim). Because participation in other roles, age, gender, race, and denomination have the potential to impact the

mechanisms of identity theory and have been the most consistently found predictors of religiosity in adolescents, these variables are included in the models.

Identity Theory and the Life Course

The life course paradigm emphasizes that people operate through a series of age-graded trajectories and role transitions. Of central importance for identity theory with respect to trajectories is the way in which people's network ties may change as they age. For example, Cairns and his colleagues (1995) found a high degree of instability in all adolescents' peer networks, but the amount of turnover was significantly greater in younger age groups. The volatility of adolescents' identity commitment from peers during young adolescence may reduce its ability to influence the salience of a stable, trans-situational identity. But research also shows that younger adolescents are more likely to have a close relationship with their parents than older adolescents (Dishion and McMahon 1998). Frequently, as adolescents age and seek greater autonomy, the strength of their ties to their parents wanes and, not surprisingly, younger adolescents' behavior has been shown to be more directly influenced by parents than older adolescents (Bailey and Hubbard 1990). Thus, adolescents' identity behavior and salience should be more strongly associated with parent commitment than peer commitment *and* this relationship should be stronger among younger than older adolescents (Hypothesis 5).

Conversely, older adolescents' relatively unstable peer ties and weakened bonds to parents should diminish the direct impact of both forms of commitment on salience and behavior. A life course perspective suggests, however, that the salience shaped by parents when adolescents are younger should continue to exert an influence on their identity relevant behavior. The mediation of commitment by salience may be especially strong for older

adolescents, such that the influence of previous ties to parents and peers operates completely through their development of stable internalized schemas. In a two wave longitudinal study of adolescents starting when they were 12 to 18 years old with a follow up when they were 19 to 25, Uecker, Regnerus, and Vaaler (2007) found that older adolescents were less likely to report a decline in their self-rated importance of religion. Thus, older adolescents are relatively set in their subjective religiosity, suggesting that their identity is influenced more strongly by religious salience than younger adolescents' identity (Hypothesis 6).

The life course perspective also suggests that experiencing a major life transition or "turning point" should influence the identity process. Transitions are age-graded role entries and exits that occur within a reasonably structured trajectory (e.g., having a child is a transition in the parent trajectory), whereas turning points involve a more severe "knifing off" process (Shanahan and Macmillan 2007). For example, Sampson and Laub (1993) showed that getting married serves as a turning point for adolescent criminal trajectories. Marriage is an alteration of the individual's commitment structure (e.g., the introduction of the spouse, in-laws, and spouse's friends), which in turn should alter the individual's salience hierarchy. The underlying mechanism of the "knifing off" may be a change in one's commitment network leading to a reordering of the salience hierarchy, which in turn prompts novel, post-turning point behaviors.

The life course perspective further stresses that the context and meaning of a life transition or turning point should have a significant effect on how the adolescent manages his/her identity (Elder [1974] 1999; Wheaton 1990). Going to college but living at home may influence an adolescent's religious identity differently than moving away to attend college. Therefore not only may experiencing a transition impact identity, but the nature and severity

of transition should alter the relationships between commitment, salience and identity related behavior as well.

For less extreme transitions (i.e., not completely socially dislocating), commitment should be more influential than salience in predicting changes in identity behavior. When experiencing transitions that do not break them from their affectively important networks, adolescents with important religious ties are more likely to maintain their pre-transition identity, while those with weaker ties are more likely to change. For example, graduating from high school but continuing to live at home may leave someone in essentially the same network that he/she occupied during high school, thereby maintaining the influence of his/her pre-transition identity commitment. Thus, adolescents with stronger pre-transition commitments are more likely to maintain high levels of religious identity behavior after the transition, whereas for those with weaker religious commitment, religious identity is likely to diminish (Hypothesis 7).

For more extreme transitions (i.e., more socially dislocating turning points), salience should be a more influential predictor of identity behavior change or maintenance than commitment from peers or parents (Hypothesis 8). Swidler (1986) argues that one's structural environment, including social ties (i.e., commitment), generally directs one's choices of action (identity behavior), but during "unsettled times" internalized values and schemas (i.e., salience) play a more important role in motivating action. During socially disruptive times created by major life transitions, such as leaving high school *and* the parent's home, adolescents rely on their internalized schema to direct their courses of action.

METHODS

Data

The data for this study come from the National Study of Youth and Religion (NSYR), a nationally representative telephone survey of 3,290 U.S. English and Spanish speaking teenagers, ages 13 to 17, and their parents. The first wave of the NSYR was conducted from July 2002 to August 2003 using random-digit-dial and drawing on a sample of randomly generated telephone numbers representative of all non cellular phone numbers in the United States. The overall response rate of 57% for the first survey is lower than desired, but it is similar to other current nationally-based surveys using similar methodologies. Further comparisons of the National Study of Youth and Religion data with 2002 U.S. Census data on households and with nationally representative surveys of adolescents—such as Monitoring the Future, the National Household Education Survey, and the National Longitudinal Study of Adolescent Health—confirm that the NSYR provides a nationally representative sample of U.S. teenagers ages 13 to 17 and their parents without identifiable sampling or non response biases (for details, see Smith and Denton [2005]).

Beginning in the summer of 2005, a second wave of the survey was conducted when the respondents were 16 to 20 years old. Of the original respondents 2,530 were re-interviewed, leading to a response rate of just under 77%. From the original sample, 3.82% could not be used because of uncompleted surveys, 4.01% refused, 1.76% were ineligible (e.g., being imprisoned, deceased, etc.), and 13.59% could not be found or contacted. A weight is used in all analyses to adjust for the potential bias created from this loss in respondents, as well as the original sampling census region of residence, number of teenagers in the household, number of household telephone numbers, and household income.

Measures

Identity Behavior. To assess adolescents' overall level of participation in religious activities, a composite of three measures, frequency of religious service attendance, frequency of youth group participation, and number of religiously sponsored activities, is used. Teen respondents were asked, "Do you attend religious services more than once or twice a year, not including weddings, baptisms, and funerals?" All respondents who answered "yes" were then asked, "About how often do you usually attend religious services?" to which they could respond: almost never, a few times a year, many times a year, once a month, 2 to 3 times a month, once a week, and more than once a week. All those who responded "no" to the first question were coded as "never" on this variable.³ Respondents were asked if they were involved with any religious youth group, defined as "an organized group of young people that meets regularly for social time together, prayer, or to learn more about their religious faith." Respondents who answered in the affirmative were asked, "About how often do you attend this youth group's meetings and events?" which had the same response options as the religious services question. Those who reported no involvement with a youth group are set to the "never" category on this measure. Finally, the respondents were asked to name all of the organized activities, hobby clubs, classes, or organizations they were involved in after school or on the weekends (specifically being directed not to include regular worship services). They were then asked, "Which, if any, of these activities are organized or sponsored by a religious organization?" The measure of religious activities is the number reported for this question.

To create a singular index of religious identity related behavior these three measures are combined using a polychoric-principal components analysis (polychoric-PCA), which is more appropriate than averaging when the component measures are not continuous. When

using a principal components analysis to produce factor scores, however, the component variables are standardized, which is why the means of these scales are not presented. At Wave 1 the three measures collectively account for 71% of the original variance with an eigenvalue loading of 2.13, which increases to 77% and 2.32, respectively, at Wave 2.

Commitment. Respondents were asked to name up to five friends and then were asked a series of questions about these friends. For the purposes of creating the *peer commitment* scale, three of these questions are used: “How many are religious?” “How many do you talk with about matters of religious belief and experience?” and “How many are involved in any religious group you are a part of?” The number of friends (out of five) the respondent reports as satisfying each of the three questions explicitly taps the level of peer “interactive” commitment, and the measure taps “affective” commitment because the questions direct the respondents to think of their five *closest* friends (i.e., those friends who are most “affectively important”). The peer commitment index is created from these three questions using the polychoric-PCA procedure. The first vector accounts for 56% of the original variance and has an eigenvalue loading of 1.68 at Wave 1.

The *parent commitment* index includes measures concerning how frequently the parent attends religious services, how important religion is to the parent, how often the family discusses religious matters, and a measure of parent-child closeness. The first two measures use questions from the parent survey. Parents were asked about their attendance at religious service with a set of questions similar to those asked of the teen. Parents also were asked “How important is your religious faith in providing guidance in your own day-to-day living?” (a 5-point response scale, ranging from extremely important to not important at all).

The next two components, frequency of religious talk and family closeness, come from questions on the teen survey. Teens were asked, “how often does your family discuss religious matters or beliefs?” The possible response choices ranged from every day to never. The family closeness index is created using five questions asked about each parent: how well the respondent gets along the parent; how close the respondent feels to the parent; and how often the parent encourages, says I love you, and talks to the respondent about personal subjects. For each question the average score from the two parents is used unless the respondent was in a one-parent family, in which case only the applicable question and score is used. These five items are combined to create a parent closeness scale with an alpha level of .81 at Wave 1. The parent closeness scale is then combined with parent religious attendance, frequency of religious talk, and perceived importance using a polychoric-PCA analysis to create a singular parent commitment index, which accounts for 54% of the variance with a 1.61 eigenvalue loading at Wave 1.

Finally, Smith (2003) suggests that religious activities may serve as a prominent site for adolescents to develop meaningful ties to non-parental adults. To account for this possibility a measure of *other adult commitment* was constructed. Teens were asked, “Roughly how many total adults, if any, do you have in your life that you can turn to when you need support, advice, or help – not including your parents?” and then “Of those adults that you can turn to, how many, if any, of them are part of a religious congregation or other religious group that you are involved in?” A measure is created to represent the proportion of religious adults to total adults that each respondent felt that he/she could turn to for support. The proportion of ties is used rather than total number of religious non-parental adult ties because identity theory claims that the strength of identity commitment is determined in part

by how consequential losing the given ties would be for the individual. This claim suggests that an adolescent who has 3 non-parental adult ties but they are all from a religious congregation (i.e., 100%) should be coded as having a stronger *other adult commitment* (in terms of religious identity) than an adolescent with a similar 3 religious non-parental adult ties but 12 total non-parental adult ties (i.e., 25%). This ratio has a mean of .38 at Wave 1 ($SD = .41$), meaning that, on average, 38% of adolescents' non-parental adult network come from a religious organization with which they were involved.⁴

Salience. The crucial aspect of measuring identity salience is assessing the “probabilities of the various identities within it [the salience hierarchy] being brought into play” (Stryker and Serpe 1982: 206). Although to date there is no standard instrument to measure salience, the NSYR has a question that locates religion in a person's identity salience hierarchy. Respondents were asked, “If you were unsure of what was right or wrong in a particular situation, how would you decide what to do? Would you most likely – do what made you feel happy; do what would help you to get ahead; follow the advice of a parent or teacher, or other adult you respect; do what God or scripture tells you is right?” This question directly asks the respondent to choose out of a potential set of identity-based options (e.g., “follow the advice of teacher or parent” would relate to a student or child identity) which one he/she most often would invoke. A dichotomous indicator of having a strong religious salience is created by coding all respondents choosing “what God or scripture tells you” equal to 1 and all others to 0. 19% of the respondents filled this category at Wave 1, increasing minimally to 20% at Wave 2.

Transitions. Three major transitions are used: experiencing a parental relationship break-up, leaving high school, and moving out of the parent's household. The first transition

indicator comes from a question asking “Since we last interviewed you in [month] of [year], how many times have the people you consider to be your parents experienced a break-up of a marriage or marriage-like relationship?” Respondents reporting one or more to this question are coded as having experienced a parental relationship break-up. The next two indicators of transitions are coded based on the reported living and education situation of the individual at the second wave of the survey in relation to these situations at Wave 1. Respondents who report attending some form of high school or home school equivalent at Wave 1 and report not being enrolled in high school for the upcoming fall semester (at Wave 2) are coded as “leaving high school.” At Wave 2 respondents were asked to provide a roster of other members living in their primary place of residence and were asked about the nature of their relationship to each of these members. All respondents had to be living with a parent figure at Wave 1. Therefore respondents who do not report a parent figure in the current household at Wave 2 are coded as no longer living with a parent figure.

Controls. The self-perceived importance of religion is an index combining two questions: “How important is religious faith in shaping your daily life?” and “How important is religious faith in shaping your major life decisions?” The response choices for both questions ranged from not important at all to extremely important. The polychoric-PCA procedure is used to combine the items, which has a first eigenvalue loading of 1.84 and explains 92% of the original variance. These questions appear similar to the question used to measure identity salience. But Stryker and Serpe (1994) clearly show that questions concerning the “importance” of an identity are conceptually distinct from salience because the former assess the internal centrality of that identity. Therefore, to be consistent with the

identity theory model, the current analyses treat these two questions as an indicator of importance and not salience.

Age is measured as a dichotomous indicator of being 16 or older at Time 1 (41% of sample).⁵ The sample is evenly split by gender with the males (50%) serving as the reference group. Race is entered as a set of dummies representing African American (17%), Hispanic (12%), and Other (5%), with Whites (66%) serving as the reference category. The measure of religious affiliation is entered as a set of dummy variables. Not religious (10%) serves as the reference category, conservative Protestant is the modal category (31%), and mainline Protestant, Black Protestant, Catholic, Jewish, Mormon, other religion, and not determinate are the remaining categories (Steensland et al. 2000). Finally, two measures are included to control for participation in other activities. All respondents were asked, “Please tell me, are there any regular, organized activities you do after school or in the evenings?”⁶ Respondents could name up to 18 activities ($u = 2.27$, $SD = 2.03$), providing a continuous measure of extracurricular activities. Respondents were also asked “During the school year, about how many hours per week did you normally work at a paid job, or did you not have a job?” A dummy is included to represent those who report working any hours (22% of analytic sample).

Analytic Strategy

Because many of the hypotheses deal in part with the relative magnitude of associations among predictors, each of the continuous measures (parent commitment, peer commitment, and religious involvement) were centered and standardized (i.e., $u = 0$, $SD = 1$) before the analyses were performed. This transformation provides a common metric for interpretation and comparison (Kutner et al. 2005). A combination of Logit and Ordinary

Least Squares regressions then are used to test the identity model on adolescents religious identity (numbered equations correspond to numbered hypotheses):

$$\text{Eq 1: } Y_{i2}(\text{salience}) = \beta_o + \beta_1 X_{i1}(\text{salience}) + \beta_2 X_{i1}(\text{commitment}) + \beta_3 X_{i1}(\text{other roles}) + \beta_4 X_{i1}(\text{demographics}) + u_i$$

$$\text{Eq 2: } Y_{i2}(\text{behavior}) = \beta_o + \beta_1 X_{i1}(\text{behavior}) + \beta_2 X_{i1}(\text{commitment}) + \beta_3 X_{i1}(\text{other roles}) + \beta_4 X_{i1}(\text{demographics}) + u_i$$

$$\text{Eq 3: } Y_{i2}(\text{behavior}) = \beta_o + \beta_1 X_{i1}(\text{behavior}) + \beta_2 X_{i1}(\text{salience}) + \beta_3 X_{i1}(\text{importance}) + \beta_4 X_{i1}(\text{other roles}) + \beta_5 X_{i1}(\text{demographics}) + u_i$$

$$\text{Eq 4: } Y_{i2}(\text{behavior}) = \beta_o + \beta_1 X_{i1}(\text{behavior}) + \beta_2 X_{i1}(\text{commitment}) + \beta_3 X_{i1}(\text{salience}) + \beta_4 X_{i1}(\text{importance}) + \beta_5 X_{i1}(\text{other roles}) + \beta_6 X_{i1}(\text{demographics}) + u_i$$

Each equation regresses the outcome for individual *i* at Time 2 on the predictor variables measured at Time 1, while controlling for the outcome's level at Time 1. Including a measure of the outcome at Time 1 when predicting its level at Time 2 controls for its stability across time, leaving the remaining variance to be explained by the Time 1 predictors. To test the potential moderating influence of age (Hypotheses 5 and 6) on the full models predicting salience and identity, Models 1 and 4 were re-estimated with interaction terms between the age group indicator and the measures of commitment, salience, and importance. Similarly these two models were estimated twice more, including interactions between the identity theory mechanisms and the parental relationship dissolution and transition to an independent household indicators in order to assess Hypotheses 7 and 8.

RESULTS

The models addressing Hypotheses 1 through 4 are presented in the corresponding columns in Table 2.1. Model 1 is a logistic regression predicting adolescents' Time 2

religious salience, while Models 2 through 4 are OLS regressions predicting adolescents' religious behavior at Time 2. Hypothesis 1, predicting that strong ties to religious individuals would increase religious salience, is partially supported. As shown in Model 1, adolescents with higher levels of religious commitment from parents are more likely to have a strong religious salience than those with lower parent commitment. Being one standard deviation higher on parent commitment is related to a 35% ($e^{.297}$) increase in the likelihood of having a high religious salience. Commitment from peers and other adults, however, is not significantly related to religious salience. These insignificant relationships do not stem from collinearity between the measures of commitment as neither peer nor other adult commitment is a significant predictor of salience by themselves. Still, the results show, consistent with Hypothesis 1, that strong ties to religious parents increase the religious salience of adolescents.

Model 1 also reveals that salience has substantial stability between Time 1 and Time 2. Adolescents with a high religious salience at Time 1 are 154% ($1+e^{.937}$) more likely to have a high salience at Time 2 than those with a low salience. Similarly an increase of one standard deviation on the rating of religious importance is related to a 48% ($1+e^{.393}$) increase in the likelihood of having a high religious salience. Females and Catholic adolescents are 41% ($1-e^{-.336}$) and 51% ($1-e^{-.704}$) less likely to have a strong religious salience, respectively. Finally, there is no evidence that salience is diminished by participation in other roles, as neither the number of extracurricular activities nor being employed is related significantly to religious salience.

Hypothesis 2 predicts that strong ties to religious friends and parents directly increase adolescents' religious identity relevant behavior. This hypothesis is clearly supported by

Model 2, as all three measures of commitment significantly influence religious behavior at Time 2. Having close religious friends ($b = .066$), strong relationships with religious parents ($b = .154$), and religious adults one can turn to for support ($b = .168$) significantly increases the amount of time an adolescent spends in religious related activities. Hypothesis 3's prediction that a high religious salience would increase religious identity behavior is similarly supported. As shown in Model 3, a high religious salience ($b = .228$) and viewing religion as important ($b = .123$) increase time spent in religious activities. These results support the primary predictions of identity theory, showing a strong positive relationship of commitment and salience with increasing participation in religious activities.

To test whether salience mediates the direct relationship between commitment and identity (Hypothesis 4), the measures of commitment and religious salience were entered together in the model predicting religious behavior. The results, shown in Model 4, do not provide support for full mediation using Baron and Kenny's (1986) criteria. But a Sobel (1982) test of the indirect effect shows that salience significantly ($p < .001$) mediates the direct relationship between commitment and religious behavior, partially supporting Hypothesis 4. A portion of parent commitment's influence on religious behavior operates through its impact on increasing the likelihood that adolescents use religion in making decisions. Still, all of the commitment measures remain significant and are reduced only slightly in magnitude when salience and importance are added to the model.

Additionally, several demographic factors influence time spent in religious activities. As expected, age is negatively related with religious participation. Coming from a non-nuclear family, being Catholic, and working in paid employment also significantly reduce religious participation, while Hispanics spend more time in religious activities than do

Whites. Being Mormon significantly increases an adolescent's participation in religious activities when the model does not account for religious commitment (Model 3), indicating that Mormons' greater level of participation stems from their integration in strong religious networks.

Differences by Age

Hypothesis 5 predicted that parent commitment should exert a stronger influence on religious salience and identity relevant behavior than peer commitment, and that this relationship would be especially prominent among younger adolescents. The first interaction model shown in Table 2.2 provides support for this prediction. Because the younger age group is the reference group of the interaction, the non-significant direct effect of peer commitment indicates that attachment to religious peers does not influence religious salience among younger adolescents. But, as expected, parent commitment's influence on religious salience is significant and much stronger for younger adolescents than older adolescents, as shown by the significant interaction term between the age group indicator and parent commitment ($b = -.244, p < .05$).

This relationship is plotted in the first panel of Figure 2.1, which displays the predicted probability of having high religious salience by age group and percentiles of parent commitment (with all other variables in the model at their mean). Figure 2.1 clearly shows that parent commitment has a stronger impact on religious salience for younger adolescents. A move from the 25th to the 75th percentile on parent commitment leads to a 10% increase in the probability of having a high religious salience among younger adolescents, whereas a similar change only results in a 4% increase in probability for older adolescents. In fact, further decomposition indicates that the slope for the older adolescents is insignificant,

meaning that parent commitment does not significantly increase the likelihood of having a high religious salience for older adolescents. These findings support Hypothesis 5 by showing that religious salience is less susceptible to outside influence once adolescents turn 16, whereas parent religious commitment significantly increases the likelihood that adolescents have a high religious salience when they are younger.

Hypothesis 5 is further supported by the age interaction model predicting religious behavior. As shown in the second column of Table 2.2, parent commitment is related more strongly to religious behavior for younger adolescents than older adolescents. This association is plotted in the second panel of Figure 2.1, which shows the predicted level of religious behavior for each age group by percentiles of parent commitment (again holding all other predictors at their mean). This plot and the significant interaction term clearly demonstrate that parent religious commitment plays a much larger role in determining younger adolescents' religious identity relevant behavior than it does for older adolescents. Taken together these results suggest that younger adolescents' religious salience and identity are shaped more directly by external ties than are older adolescents' salience and identity.

Contrary to the predictions of Hypothesis 6, however, the influence of salience on religious behavior does not differ significantly by age groups, as indicated by the non-significant interaction term between the age group indicator and salience. The significant main effect of salience shows that having a high religious salience increases the religious behavior of younger adolescents and further decomposition demonstrates a similar pattern for older adolescents. Additional analyses examined potential differences in the magnitude of the influence of salience by age. When the final model is estimated separately by age group the coefficient for salience is twice as large for older adolescents than younger adolescents

(results available upon request). Although salience clearly influences behavior among all adolescents, there is some evidence that this influence is even greater for those adolescents over 16.

Differences by Transition

Hypotheses 7 and 8 predict that commitment is a stronger influence on identity related behavior when people experience mildly dislocating transitions, whereas salience should be the primary predictor of identity relevant behavior after a significant disruption. The first transition examined is whether the adolescent experienced a parental relationship break-up. A parental dissolution can create instability psychologically and socially for adolescents, which may directly impact the relationship between identity commitment, salience, and behavior. The results of these interactive models are presented in the third and fourth columns of Table 2.2. There are virtually no differences between these interactive models and the base models from Table 2.1. None of the key interaction terms are significant and the majority of the other predictors remain unchanged. The model does show, however, that experiencing a parental break-up directly disrupts the stability of religious behavior. The influence of previous religious activity participation on future participation is weakened when the adolescents' parents' relationship dissolves. Still, these models provide no support for Hypothesis 7 or 8, as the influence of commitment and salience is unchanged by experiencing a parental break up.

The next two transitions tested are leaving high school and establishing an independent household. These transitions signal a significant step towards adulthood for most youth and often are accompanied by major changes in their social environments and networks. Undergoing these transitions, however, is directly linked with one's age. The vast

majority of adolescents do not have the opportunity to experience either of these transitions until they are at least 18 years old. Adolescents from the Time 1 older age group (i.e., 16 or older at Time 1) all were 18 or older at the time of the follow-up survey, so this analysis is restricted to this age group.⁷ Further, to explicitly assess how the severity of a transition impacts the identity theory mechanisms, “leaving the parent’s home” is compared *among* adolescents who have left school. That is, the models test the influence of a more disruptive turning point (leaving school *and* the parents home) versus a less disruptive transition (leaving school but continuing to live with a parent). The results for the models, including the main effect for experiencing the transition and each of its interactions with commitment, salience, and behavior, are presented in columns 5 and 6 of Table 2.2.⁸

There is limited support for Hypothesis 7, which predicted that commitment transcends salience in predicting identity among people who experience minor transitions. The final column of Table 2.2 shows no significant interactive influence between commitment and leaving the parents home on religious behavior. But further decomposition of the overall interaction, including the direct effects, indicates that parent commitment has a positive and significant ($p < .01$) influence on religious behavior for youth continuing to live at home, whereas parent commitment does not significantly influence religious behavior for adolescents’ who move out of the parent’s home after leaving high school (Aiken and West 1990).⁹ Further, when the final model is tested on each group separately, Time 1 commitment is only a significant predictor of future religious behavior for the adolescents who have not moved away from the parents’ home after high school. Splitting the analysis in this manner also reveals that Time 1 salience does not significantly predict future religious participation among adolescents who continue living at home (results available upon request). The

influence of identity commitment on religious behavior is not significantly different by the type of transition that adolescents experience. Identity commitment, however, is a significant predictor of religious behavior for adolescent who continue living at home after high school but does not significantly influence religious behavior for adolescents who move out. Additionally, parent commitment is a stronger predictor of future identity than is salience among adolescents who only experience the former, less disruptive transition.

As predicted by Hypothesis 8, the transition out of the parent's home moderates the connection between salience and religious behavior. As shown in the last column of Table 2.2, religious salience has a much stronger influence on participation in religious activities for adolescents who move out of the parents home after leaving high school ($b = .370, p < .01$). This relationship is displayed in Figure 2.2, which illustrates the predicted level of religious behavior by salience and moving out versus remaining in the parent's home after leaving high school. Having a high religious salience increases the level of religious participation for those who continue living with their parents, as is indicated by the significant ($p < .05$) main effect of salience on religious behavior. This influence, however, is more pronounced for adolescents who have moved out of their parent's home. The difference in the predicted level of religious participation by religious salience for those youth who have moved out of the parent's home is over twice as large (.561) as the difference among adolescents who continue to live with their parents (.190). Collectively, these results support Hypothesis 8, showing that identity salience has a stronger impact on future identity related behavior when adolescents experience a severe transition.

The results thus provide support for the prediction that major life transitions moderate the identity process (Hypotheses 7 and 8). For adolescents who experience a less severe

transition (i.e., leaving high school but not leaving home) commitment has a stronger influence on religious participation than does salience. But for adolescents who experience a more significant transition (i.e., leaving high school and moving out of the parents home) religious activity is more strongly influenced by religious salience than religious commitment. Hence the declining importance of commitment and increasing consequence of salience that occurs as adolescents age is more pronounced when adolescents make a significant transition towards adulthood.

CONCLUSIONS

Despite being one of the most influential sociological frameworks for the study of the self, identity theory has continued to be limited by its static conceptualization of identity. This study provides a dynamic understanding of identity by integrating key insights from the life course paradigm. This incorporation reveals an unfolding identity process as people age and experience life transitions. The prominence of ties to significant others and identity salience for shaping future identity is dependent upon the situational imperatives encountered at given ages and the type of transitions that adolescents undergo in the progression to adulthood.

When these life course processes are not considered, the findings provide support for the basic expectations of identity theory: having strong relationships with religious parents influenced the likelihood that adolescents would use religion in guiding their action (Hypothesis 1) and directly increased participation in religious behaviors (Hypothesis 2). In turn, having a high religious salience positively influenced the amount of time adolescents spent in religious activities (Hypothesis 3).

Yet the application of identity theory to adolescents' religious identity provides evidence that the connections between the identity mechanisms vary at different stages of the life course. First, adolescents' religious salience was not influenced by commitment from peers or other adults. Although identity theory would expect that certain ties may exert a stronger influence on salience than others, it was surprising that strong ties to religious peers and other adults did not significantly impact individuals' religious salience. This lack of a direct connection between these forms of commitment and salience may come from the volatile nature of adolescent non-parental networks. The potential high level of instability in these networks may limit their ability to impact a stable internalized schema.

Second, salience did not fully mediate commitment's influence on behavior (Hypothesis 4). Every measure of commitment retained its significance and negligibly declined in magnitude from the model when salience was not included. Commitment's influence on religious participation, therefore, is not explained completely by its connection to salience, meaning that adolescents' religious identity behavior is influenced directly by external ties net of the influence of salience. Interestingly, parent commitment and other adult commitment were much stronger predictors of religious behavior than was a connection to religious peers. Popular opinion often laments the declining influence of parents for adolescents, but the analyses clearly show that parents play a significant role in determining adolescent religious pathways.

Consistent with considerations based on the life course paradigm, even within adolescence the base identity theory model was modified by adolescents' age. Parent religious commitment was a much stronger determinant of salience and religious behavior for younger adolescents than for older adolescents (Hypothesis 5). In fact, parent commitment

had no significant relationship with salience for adolescents older than 16. Parents, however, did influence younger adolescents' salience and behavior, as parent commitment had a strong, positive impact on both measures for adolescents less than 16 years of age. These findings suggest that religious salience and behavior are reasonably set by the time adolescents turn 16. Parents can influence adolescent religious pathways, but the time to do so is limited.

This finding demonstrates the need for a more clear integration of a life course paradigm with identity theory. Specifically, these findings underscore the importance of age-graded patterns in linked lives to identity theory. Currently, identity theory suggests universal connections among commitment, salience, and one's identity behavior, a prediction generally supported by the first stage of the analyses run on a broad age range. Yet, the interactive models clearly show an age graded pattern, such that the influence of parent commitment weakens as adolescents grow older. While parents exert a strong direct influence on salience and behavior for younger adolescents, their impact on religious participation for older adolescents may be more indirect. Older adolescents' religious behavior appears to be more strongly driven by religious salience, but connecting the results together suggests that this internalized schema was shaped by parents when the adolescents were younger.

The analyses also showed that the developmental aspect of identity is not only one of aging but also is influenced by life transitions. Among all adolescents older than 16 at the first wave, religious commitment of peers and parents significantly influences religious behavior of adolescents who left high school but continue living with a parent figure, but these ties are inconsequential for youth who have moved out of their parent's home (Hypothesis 7). Having gone through the transition of establishing an independent household,

religious behavior is almost entirely determined by religious salience and perceived importance (Hypothesis 8). It must be emphasized that both commitment and salience were measured at the first wave, meaning both groups of adolescents were living with parents at the time of measurement. Transitioning out of this stable commitment structure leads to internalized schemas influencing action, whereas remaining in similar environments maintains the direct influence of external ties. This process of social development may be applicable to transitions across the life course, although future research should continue to investigate whether adults' commitment is stable to the point of being immune to such dislocations.

These findings are consistent with theories of action stemming from the sociology of culture (i.e., Swidler 1986). For younger adolescents, who live in presumably somewhat more settled times than older adolescents who are transitioning to adulthood, identity behavior is more strongly influenced by their connections to affectively important individuals. But during the unsettled time of leaving high school and establishing one's first independent household, one's internalized schema assumes the primary role in shaping identity behavior.

These findings suggest that identity theory may be an adequate model during settled lives, but the connections between commitment, salience, and behavior may need to be rethought for unsettled lives. Future research should more directly attend to situations that generate such unsettled times. This type of study will aid the understanding of identity management beyond adolescence to other age groups and transitions. For example, studies of work trajectories would benefit from connecting the age at which employment transitions occur (e.g., middle age versus retirement) and the level of disruption experienced during

these transition (e.g., being laid off *and* relocating) when examining how people manage their occupation based identities across the life span. These types of investigations will enhance our understanding of how individual biographies intersect with social structures in driving human action.

The study has limitations that should be noted. Ideally a more direct measure of religious identity's salience relative to other possible identities would be available in the data set. Specifically, the salience measure indicates if religion is the *most* salient identity, rather than placing it within a relative salience hierarchy. Ideally the question would have asked respondents to compare the likelihood of using religion in making decisions versus each of the other potential options. Doing so would have provided a relative ranking of religious salience that would be more comparable to previous studies of identity theory. Additionally, a third wave of data would help more explicitly test the suggested temporal relationship among commitment, salience and behavior. The supposition that commitment's influence on salience and identity behavior weakens as adolescents age should be tested by continuing to follow the younger group into young adulthood.

Despite these potential limitations, this project has demonstrated that identity theory provides a reasonably consistent model of religious identity but that its explanatory value can be enhanced by a life course perspective. Age-graded trajectories and transitions modify the links between commitment, salience, and religious behavior. At a certain point, adolescents appear to have established a relatively stable identity salience that is not influenced directly by commitment. This salience, however, was shaped by parent commitment and continues to exert a strong impact on adolescents' religious behavior, especially when the adolescent experiences a significant turning point. Investigating these patterns of relationships on other

identities and at different ages will continue to enhance both theories of identity and the life course, in turn improving our understanding of human behavior across the life span.

ENDNOTES

1. Although there have been a few studies of identity during major role transitions (e.g., Burke 2006, Cast 2004), they primarily have been conducted on a micro interactional level, focusing on individuals' subjective understanding of their identity. This study, however, focuses specifically on how broader social context is related to individual behavior, making Stryker's theoretical framework appropriate.
2. Salience should not be equated with importance. Stryker and Serpe (1994) refer to importance as "psychological centrality" and define it as the self-perceived importance of a given identity to the individual's self-conception. Importance, therefore, is an internal ranking, whereas salience is the behavioral likelihood of utilizing an identity across situations. Because importance is not a central aspect of Stryker's identity theory it is not discussed to the same extent as the other primary mechanisms.
3. One of the key postulates of identity theory is that the identity related behavior is a matter of choice (i.e., not required or coerced by some outside force). Yet it could be argued that church attendance may not be completely within adolescents' control. The NSYR includes a question asking "If it were completely up to you, how often would you attend religious services?" The measure of desired attendance and actual attendance are significantly positively correlated (.62; $p < .001$). Additionally, the results of the final analyses are similar whether they are run using the measure of behavior constructed with desired attendance or actual attendance. To be consistent with previous studies of religious behavior, the overall index includes actual reported attendance.
4. Tests conducted to assess the reliability of including all commitment measures in one scale revealed that peers, parents, and other adults commitment are better operationalized as three distinct concepts rather than grouped as one. Thus, three separate measures of commitment, one for each source, are included.
5. Splitting the sample at age 16 provides an even distribution between two groups. This cut-point is substantively meaningful as well because this is when a majority of adolescents can legally drive and have greater autonomy in determining their participation in various activities, including religion.
6. For those respondents who were no longer in school, "after school" was altered to read "during the day," and everyone was instructed to not include paid employment as an organized activity.
7. Some of the respondents in the younger group did report moving out of the parent's household ($n = 40$). It is assumed that these cases are exceptional due to their low frequency and the non-normative nature of the transition for this age group. They are not included in the models.
8. Respondents who reported not being in high school (e.g., dropped out) at Wave 1 or who report still being in high school at Wave 2 are excluded from the analysis because they

did not experience the “leaving school” transition, which is why the analytic sample for the “transition” analysis ($n = 836$) is less than that for the entire older population ($n = 906$).

9. A similar pattern of significance is found for both friend and other adult commitment.

Table 2.1. Coefficients from Regression Models Predicting Religious Salience and Behavior: Total Sample (N = 2300)

	Model 1	Model 2	Model 3	Model 4
	Religious Salience (T2)	Religious Behavior (T2)	Religious Behavior (T2)	Religious Behavior (T2)
<i>Commitment (T1)</i>				
Peer Commitment	.044	.066***		.051**
Parent Commitment	.297***	.154***		.129***
Other Adult Commitment	.278	.168***		.125**
Religious Salience (T1)	.933***		.228***	.188***
Importance (T1)	.393***		.123***	.066***
Older Age-Group (T1)	-.013	-.101***	-.111***	-.101***
Female (T1)	-.336*	-.011	-.060*	-.028
<i>Family Structure (T1)</i>				
Non-Bio 2 Parent	-.285	-.099**	-.153***	-.110**
Single Parent	-.069	-.134***	-.154***	-.130***
<i>Race (T1)</i>				
Black	-.095	.030	.108	.010
Hispanic	.367	.096	.144**	.097*
Other	-.448	-.008	.027	.011
<i>Religious Affiliation (T1)</i>				
Conservative. Protestant	.223	.038	.148*	-.005
Mainline Protestant	-.534	-.068	.012	-.082
Black Protestant	-.011	-.031	.085	-.054
Catholic	-.704*	-.134*	-.012	-.133*
Jewish	.366	-.116	-.063	-.106
LDS	-.037	.091	.292**	.061
Other Religion	.084	-.105	-.026	-.142
Indeterminate	.221	-.053	-.022	-.052
Number of Activities (T1)	.045	.011	.015	.014
Employed (T1)	.132	-.086*	-.075*	-.082*
Religious Behavior (T1)		.296***	.333***	.268***
Constant	-1.866***	.019	-.036	.026
<i>R-Squared</i>		.471	.455	.482

Source National Study of Youth and Religion.

Note. *p < .05, **p < .01, ***p < .001. Two-tailed test. Reference group for categorical variables are as follows: Family Structure = 2 Parent Biological; Race = White; Religious Affiliation = Not Religious. Model 1 uses logistic regression, while Models 2 through 4 employ OLS regression.

Table 2.2. Coefficients from Regression Models Predicting Religious Salience and Behavior Including Interaction with Age, Parental Relationship Dissolution, and Moving out of Parent's Home

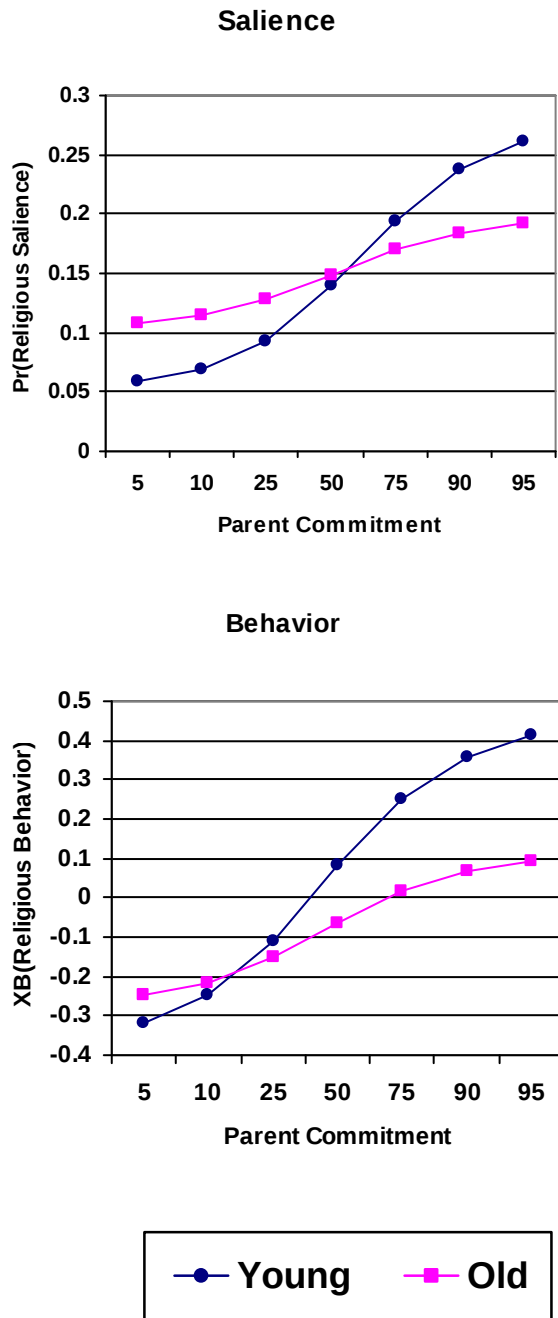
	Older		Parent Break-Up		Leaving High School & Moving Out	
	Religious Salience	Religious Behavior	Religious Salience	Religious Behavior	Religious Salience	Religious Behavior
<i>Commitment (T1)</i>						
Peer Commitment	.030	.053**	.048	.049**	.031	.062*
Parent Commitment	.395***	.164***	.284***	.119***	.151	.089***
Other Adult Commitment	.342	.107*	.260	.112**	.054	.157*
Religious Salience (T1)	.795***	.141**	.885***	.198***	1.045***	.190*
Importance (T1)	.406***	.058**	.421***	.066***	.457***	.079**
<i>Older Age Group (T1)</i>	.108	-.131**	-.010	-.100***		
Female (T1)	-.336**	-.027	-.339**	-.031	-.488*	-.039
<i>Family Structure (T1)</i>						
Non-Bio 2 Parent	-.287	-.112**	-.264	-.098**	-.486	-.142*
Single Parent	-.080	-.131***	-.024	-.114**	-.377	-.179**
<i>Race (T1)</i>						
Black	-.066	.017	-.084	.036	.009	.083
Hispanic	.363	.102*	.350	.104*	.368	.122
Other	-.438	.007	-.435	.014	-.538	.011
<i>Religious Affiliation (T1)</i>						
Conservative Protestant	.259	.004	.266	.015	.265	-.097
Mainline Protestant	-.502	-.067	-.512	-.070	-.092	-.160
Black Protestant	.005	-.045	.034	-.042	.277	-.128
Catholic	-.658	-.118*	-.686*	-.120*	-.605	-.091
Jewish	.419	-.097	.377	-.089		-.025
LDS	-.039	.063	.008	.092	-.279	.007
Other Religion	.060	-.158	.116	-.127	.638	-.123
Indeterminate	.207	-.046	.225	-.023	.019	-.025
Number of Activities (T1)	.044	.015*	.044	.013	.072	.021*
Employed (T1)	.129	-.090**	.118	-.089**	.102	-.057
Religious Behavior (T1)		.290***		.297***		.254***
Transition			-.255	-.053	-.504	-.189*
<i>Transition X</i>						
Friend Commitment (T1)	.054	-.001	-.076	-.005	.250	-.027
Parent Commitment (T1)	-.244*	-.087**	-.000	.005	-.232	-.048
Other Adult Commitment (T1)	-.167	.043	.062	.069	.068	-.013
Salience (T1)	.337	.119	.258	-.163	.531	.370**
Importance (T1)	-.024	.019	-.165	.002	-.153	.060
Religious Behavior (T1)		-.057		-.175***		-.097
Constant	-1.961***	.024	-1.859***	.016	-1.692***	-.039
<i>n</i>	2300	2300	2300	2300	863 ^a	863
<i>R-Squared</i>		.488		.489		.489

Source National Study of Youth and Religion.

Note. *p < .05, **p < .01, ***p < .001. Two-tailed test. Reference group for categorical variables are as follows: Family Structure = 2 Parent Biological; Race = White; Religious Affiliation = Not Religious. The models predicting salience uses logistic regression, while the models predicting behaviors employ OLS regression.

^aThe models comparing adolescents still living with a parent versus adolescents who have moved out of the parent's home are estimated only on respondents who were 16 or older at Time 1 and who have left high school by Time 2, which is why the *n* is less than in the previous models on the total sample.

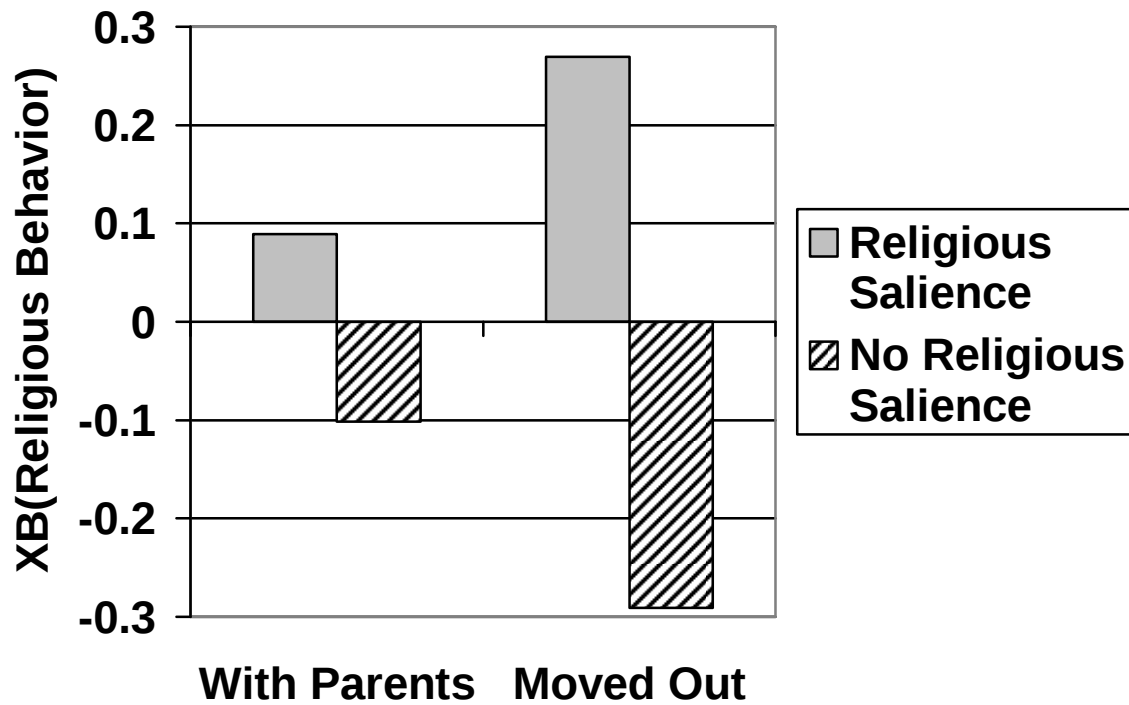
Figure 2.1. Predictions of Salience and Religious Behavior by Age Groups: Teens Older than 16 (n = 906); Younger than 16 (n = 1396)



Source National Study of Youth and Religion.

Note: The model for religious salience is a logistic regression, meaning the y-axis of this figure corresponds to the predicted probability of a high religious Salience at Time 2 (holding all other variables at their mean). Whereas, the model for religious Behavior is an OLS regression, meaning the y-axis for this graph represents the predicted level of religious behavior at Time 2 (holding all other variables at their mean).

Figure 2.2. Predicted Religious Behavior by Time 1 Religious Salience and Moving out of Parent's Home among Adolescents Who Have Left High School: Live With Parents (n = 630) and Don't Live with Parents (n = 233)



Source National Study of Youth and Religion.

Note: The model for religious behavior is an OLS regression, meaning the y-axis for this graph represents the predicted level of religious behavior at Time 2 (holding all other variables at their mean).

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CHAPTER 3

ADOLESCENT SOCIAL TYPE IDENTITY CHANGE: THE INFLUENCE OF ASCRIBED VERSUS ACHIEVED FACTORS

ABSTRACT

One of the most recognized aspects of adolescent life is the presence of socially labeled crowds, such as Jocks, Preps, or Punks. Often adolescents are portrayed as experimenting with these identities as if they were trying on different hats. The stringent requirements for entry into these crowds suggests, however, that these types of adolescent identities are better characterized by stability than change. And when adolescents do change identities, such changes should reflect achieved characteristics rather than ascribed traits. Results from a longitudinal data set that contains unique information on adolescents' reports of their self-attributed and perceived peer-attributed identity, provide mixed support for these predictions. Almost half of all adolescents report an identity change. Yet within each identity the modal path is to maintain that identity or move to a general identity, such as Normal. Achieved characteristics, primarily extracurricular participation and substance use, prove to be the most influential predictors of change in identity. Analyzing these predictors configurationally reveals that numerous, complicated pathways can lead adolescents into a particular identity. Collectively the results call for a new conceptualization of adolescent social type identities that encompasses how both ascribed and achieved mechanisms lead to changes in these identities over time.

INTRODUCTION

Numerous studies have examined the types of identities that adolescents hold (Brown 1990, Coleman 1961, Milner 2004). Milner (2004) found a plethora of labels for these identities including preps, jocks, nerds, Goths, cowboys, and normals. These types of identities, often referred to as “crowds,” form a central part of adolescent lives and impact their well-being and feelings of self-worth (Brown 1990, Eder 1995). These identities are in line with Klapp’s (1958) discussion of “social types” in that both concepts refer to generally agreed-upon distinctions that situate people in social structures, such as schools.¹ Social type identities are thus a central part of a persons’ self-definition, providing a crucial piece of the answer to the question of “Who am I?” (Thoits and Virshup 1997).

Social type identities are not as universally defined as role-based identities (e.g., student, son, sister), which creates variation and contestation in their definition and requirements of membership. For example, understanding what makes an adolescent a student is much clearer than what leads an adolescent to identify as a punk. Because social type identities are not firmly connected to roles, the process by which adolescents assume specific social type identities is not well understood.

Previous research has examined the process involved in adolescents changing these types of identities. For example, drawing on ethnographic data from juniors in high school, Kinney (1999) found that adolescents formed and adopted a new “hippie” identity through interaction with former hippy adults and that youth then maintained their identities through interaction with agemates. This investigation and others like it, however, offer little insight into differences between the types of teens who became hippies and those youth who maintained previous identities (see also Kinney [1993]). These types of studies have focused on answering the “how” aspect of adolescent social type identity change, but they have not

adequately addressed the equally pressing question of “why” adolescents change social type identities.

Part of the reason for this gap in the research could stem from the predominant acceptance of Erik Erikson’s (1968) theory of adolescent identity. Erikson portrays adolescence as a time in which youth experiment with their identity, meaning that adolescents assume several different identities over time. A foundational assumption of this theory, therefore, is that adolescent identities are temporary and fluid. That is, the theory contends that identity in adolescence would be better characterized by change than stability. Yet, little research has examined whether this description is accurate, especially with respect to social type identities. Therefore, the first objective of this study is to assess the degree of change and stability in adolescent social type identities. This study, therefore, provides a novel, encompassing test of a foundational assumption in adolescent research.

The dominance of Erikson’s theory also may have contributed to the lack of research examining factors that lead to specific identity changes. Erikson (1968) asserts that adolescents search for a final identity by moving through several different identities, and this process can best be described as “the persistent adolescent endeavor to define, overdefine, and redefine themselves” (p. 87). Adolescents’ movements through different identities stem from their attempts to find acceptance and recognition. When adolescents assume an identity that does not meet this need, they can simply “redefine” themselves. This theory, therefore, presumes that adolescents change their identity because they so desire, which leaves little room for social predictors in explaining identity movement.

Unfortunately the studies that attempt to challenge this assumption and explain the social precursors of identity alterations do not support their claims empirically, use stable,

ascribed traits to explain multiple and spontaneous changes, and disregard evidence showing that not all adolescent identities are determined by ascribed characteristics. For example, Eckert (1989) argued that socioeconomic status (SES) disparities separate who becomes a “jock” from a “burnout.” But she offered no empirical support for significant differences in the class backgrounds of the two groups’ members, could not account for why many jocks became burnouts even though their SES did not undergo any accompanying change, and did not address Coleman’s (1961) finding that parents’ education and income were not associated with the adolescent’s crowd membership during high school (see also Brown [1990]). Previous studies’ predominant focus on ascribed characteristics as the determinant of adolescent identity, therefore, has left several key questions unanswered. The second objective of this study is to more thoroughly investigate the predictors, both ascribed and achieved, of movements into specific identities.²

Uncovering potential patterns in such movements provides insights on adolescent identity. First, this analysis presents evidence bearing on the rigidity and fluidity of adolescent identities (i.e., whether adolescents are able to actively “try on” numerous different identities or if there are social barriers preventing such experimentation). Second, it sheds light on how identities are successfully or unsuccessfully maintained, focusing on ascribed versus achieved nature of adolescent identities.

Using a longitudinal sample of students from six high schools, this study examines the level of change in adolescent social type identities and compares the impact of ascribed versus achieved characteristics on the likelihood of adolescents making specific identity alterations. The data include adolescents’ self reports of their claimed identity as well as the identity that they perceive peers assign to them. To date, most examinations of adolescent

social type identity change have relied on researcher constructed identities (e.g., Strouse 1999) or utilized single site, ethnographic research (e.g., Kinney 1993). Using multi-school, longitudinal data with adolescent reported identities allows for a rigorous analytic examination of the extent of identity change and the predictors of that change.

Social Type Identity Change in Adolescence

Erikson's (1968) theory of identity development often serves as the guiding theory for research on adolescent identity. The theory claims that adolescence is a time of identity exploration and development. Youth go through a series of stages, each of which involves identity experimentation. As adolescents age this exploration wanes and they finally come to settle on their true identity at the end of adolescence. According to this perspective, identities are like hats that youth try on as they progress towards their final identity achievement.

Accordingly, adolescence is viewed as a time of frequent identity change. Indeed, the few studies that have looked directly at identity movement in adolescence provide some support for this conclusion. Strouse (1999) found that 65% of adolescents changed crowds between the 10th and 12th grade. But crowd membership was defined through analytic clustering techniques, not self or peer reports. Identity change, therefore, was determined by a change in behaviors (i.e., changing analytic clusters), but it is unclear whether adolescents actually changed their claimed or peer-defined identity. Thus, the level of change versus stability in adolescent social type identity remains unclear.

Ethnographic studies of teenagers provide reason to expect that adolescents are more likely to maintain, rather than change, their social type identities over time. This research has shown that membership in adolescent crowds is extremely controlled and prohibitive. Milner

(2004) found that crowds actively complicated the requirements of membership in order to limit the number of people who could take on that identity. Adolescents may not be able to change their identities because of the social barriers to such alterations. In adolescence, peers play a significant role in controlling who is allowed to take on particular identities. Even if adolescents desired to change identities they may be unable to do so.

Further, many of the qualifications for assuming these identities could not be achieved through an individuals' psychological volition. Milner (2004) showed that the assumption of particular identities required adolescents to be on the right sports team (i.e., being athletically gifted) or have the financial resources to purchase contemporary fashions. It is unlikely that adolescents could easily attain these requirements, thus reducing the probability of identity change. Notably, such restrictions are not limited to high status groups. Kinney (1999) described how adolescents who took on a "hippie" identity had to dress in a certain manner, listen to particular music, and take part in community activism, all of which require economic and social resources that some adolescents may not possess.

The restrictive nature of these crowds suggests that adolescents cannot easily alter their identities or that at least some identity changes are more difficult than others. This difficulty of changing one's identity should be particularly true of specialized identities (e.g., Jocks, Skaters, Punks). Even Strouse (1999), who claimed that change was more common than stability, found that the majority of this change came from adolescents moving into the "Average" crowd. This type of change does not fit with a process of identity exploration that Erikson's theory portrays. Therefore, adolescent identity should be better described by stability than change. I expect that the majority of adolescents to maintain, rather than change, their identity over time (Hypothesis 1).³

Predicting Social Type Identity Change

Even if the majority of adolescents do not alter their identities, there assuredly are some youth who do take on new identities over time. The majority of research that has examined specific identity transformations has relied primarily on socioeconomic standing as the central determinant of this change (Eckert 1989; Hollingshead 1949; Polk 1975; Willis 1977). For example, Eckert (1989) detailed how the different circumstances faced by upper versus lower class students create two distinct groups in high school, “jocks” and “burnouts.” She argued that students from lower class families, due to the constraints of their parents’ occupations, become detached from traditional institutions, primarily school. In contrast, parents of adolescents from upper class families are more likely to rely on school based organizations to serve as loci of control. Adolescents from upper class families then become invested in these activities and attached to the institution (i.e., school) in which they are located. This differential experience and connection to the school forms the line by which the two groups are distinguished in high school (i.e., students who conform to the expectations of school versus students who defy them).

The two major objections to this line of reasoning, as outlined by Brown (1990), are that (1) there are more divisions within adolescent identities than there are socioeconomic classes, and (2) there is more variation, in terms of class, within adolescent crowds than between them (Buff 1970; Cusick 1973; Kandel 1978). Strouse (1999), using a cluster analysis, found five distinct groups, and using student reports of existing crowds, Brown and his colleagues (1993) concluded there were at least 6 distinct groups. Hence, this evidence suggests that a simple class division could not account fully for the multiple divisions found in adolescent crowds.

Further, most empirical studies have found little evidence of class homogeneity within adolescent identities. Coleman (1961) found that participation in athletics, academic achievement, and knowledge of popular culture were better predictors of crowd membership than were parent income or education (see also Strouse [1999]). The lack of support for socioeconomic status as the force that sorts adolescents into particular identities suggests there could be a more active aspect to this process. Specifically, achieved characteristics should be more influential than ascribed factors in determining an adolescent's social type identity (Hypothesis 2).

In support of Hypothesis 2, Eder (1995) found that the segregation of adolescents into different identities was determined by the ability to conform to established norms. Specifically, she noted the importance of participating in the "right" extracurricular activities in demarcating adolescent crowds (primarily athletics for boys and cheerleading for girls). Milner (2004) further explained that in an effort to protect their status, certain crowds require multiple behaviors for entry, such as playing football and getting good grades (see also Goldberg and Chandler [1989]). Collectively, this body of research supports the hypothesis that, among adolescents, achieved characteristics are more important in predicting adolescent social type identity change than are ascribed traits.

More than simply understanding identity change, this project seeks to explicitly analyze movements into specific identities. McFarland and Pals (2005), using a longitudinal data set of students in 6 high schools, investigated predictors of identity change over one year of high school. But they only assessed change in general, assuming that the predictors would influence all types of identity change similarly. The fact that their models did not delineate between the types of identity change (i.e., estimating the change to a Nerd and the change to

a Deviant separately) may explain why the finding did not reveal many significant predictors of identity movement. For example, being on the basketball team may increase the likelihood that an adolescent will become a Jock but decrease the probability she will become a Nerd. Analysis that only estimates the influence of such participation on *any* change would negate the unique, directional impact it has on the different types of identity change. One of the primary contributions of this research is expanding the investigation to understand exactly what set of factors lead to movements into each possible identity.

Hypothesis 2, however, should not be taken as completely discounting the import of ascribed traits in determining adolescent identities. Some ascribed characteristics may be influential for given identity entries. For example, Garner and her colleagues (2006) discovered that a few crowds in the schools they studied were implicitly defined by having at least a minimal socioeconomic standing. Students at one school identified particular groups with brand name clothing, such as the “Kate Spades” and the “Abercrombie Crew.” Although there were other criteria for belonging to each of these groups, to even be considered for membership one’s family had to be able to afford these relatively expensive, designer fashion items. While SES and other ascribed traits may be influential for specific types of identity changes, it is hypothesized that achieved characteristics are related more frequently and demonstrate a stronger influence across the range of possible identity movements.

Becoming Normal

The studies noted above also demonstrate the complex requirements of these identity movements. That is, an adolescent might need to have a high SES, a high GPA, and participate in certain activities to get into the Popular group. Any one of these factors alone

may not be enough to lead to such an identity change. Further, certain identity changes may rely on highly complicated combinations of factors (i.e., having factors at high levels conjoined with other factors at low levels), rather than requiring all characteristics at high or all at low levels.

One such change is becoming “Normal,” a label adolescents use to describe individuals “who get along with students in most other crowds” (Stone and Brown 1999, 8). Although “Normal” is a self and peer identified group among adolescents, scholars typically use it to refer to adolescents who are not explicitly placed into any other category (Kinney 1993, Milner 2004, Strouse 1999). Adolescents in this group are often described as being at or below average on every important indicator of crowd membership (e.g., academic achievement, deviance, extracurricular participation). Researchers assume that Normals cannot or do not meet the required expectations for any specific identity, making them “remainders” of the adolescent identity world.

Perhaps the quintessential study of the Normal group was David Kinney’s (1993) research on junior high Nerds becoming Normal in high school. In examining this movement, he concludes that adolescents who became Normal did so through the increased opportunity for participation in extracurricular activities in high school and a perceived inner growth. While Kinney’s study provides the cornerstone for this portion of the analysis, it suffers from notable limitations that must be addressed.

First, Kinney primarily focused on adolescents’ self description as Normal. Yet, McFarland and Pals (2005) found that 30% of high school students self identified with a crowd that they simultaneously recognized was not the crowd with which their peers would identify them. Further, Stone and Brown (1999) discovered that the Normal group was the

most frequently self identified group, regardless of the individual's peer identified group membership. Although Kinney's research points to reasons for self identification as Normal it does not address the equally important issue of peer identification as Normal.

Also, Kinney's research only focuses on the movement from a lower status group to the Normal group. Stone and Brown (1999) found that students in the Popular group were the most likely to self identify as Normal. This finding suggests that movement into the Normal identity does not come only from adolescents in lower status groups. Thus increases in personal self confidence or participation in activities may not fully explain who becomes Normal.

Finally, although Kinney does an excellent job of explaining *how* certain adolescents became Normal, he does not provide sufficient answers to the equally pressing question of *why* certain adolescents become Normal. Assuredly there were adolescents who remained in the Nerd group throughout high school, but Kinney's work provides little information on what differentiated adolescents who changed identities from adolescents who did not. Thus, the current research project seeks to fill in these gaps by: examining both self and peer identification as Normal, determining the sources of movement from all groups into the Normal group, and focusing on the pre-existing behaviors that jointly provide for a movement into this group versus maintenance of previous identities.

Goffman's (1959, 1963) theory of impression management guides the specific expectations for this part of the analysis. This theory contends that maintaining any identity takes a great deal of work, a proposition that has been confirmed empirically among adolescents (Eder 1995; Milner 2004). Specifically, Goffman showed that people consciously perform in accordance with a strict set of social norms to prevent being labeled with a

negative identity (i.e., they had to work to be viewed, at least, as normal). Just as Goffman found that former criminals disguised any markers of their negative past by moving, getting different jobs, and dressing in a professional manner, so too some adolescents who participate in deviant behaviors may join extracurricular activities, do above average in the classroom, or befriend non-deviant friends to maintain a Normal identity (i.e., as opposed to being a Deviant or Burnout).

If this prediction is true, individuals' who maintain highly complex (perhaps incongruous) configurations of characteristics and behaviors should most consistently become Normal (Hypothesis 3). For example, an adolescent likely has to participate in some deviant activities, to not be placed in the Nerd group, but concurrently must participate in some school activities, to avoid an Alternative identity. Or, adolescents from families with a low socioeconomic status likely have to participate in several activities and maintain a high GPA to avoid the Deviant or Burn Out identity. Assessing this hypothesis helps to uncover whether Normal should be treated as an identity in its own right or as some indiscriminate, default identity. Understanding how adolescents become Normal not only sheds light on this particular group but also furthers the understanding of adolescent identity formation more broadly by highlighting the complex conjunction of behaviors necessary to adopt and maintain identities. Additionally, this portion of the analysis examines the potential for multiple pathways to lead to a similar identity (i.e., equifinality).

METHODS

Data

The data for this study comes from a longitudinal survey of six high schools. Students in the 9th through 12th grade in 6 Northern California schools were given in-school

questionnaires during the 1988 and 1989 academic years (for full details of the sampling procedure see Steinberg, Dornbusch, and Brown 1996).⁴ Only students who were in class on the day in which the survey was administered completed the questionnaire, and no effort was made to follow students who graduated, were absent, or left the school district. There are 6,851 respondents in the base sample at Time 1. But the questionnaire was given in two parts on two different days during the school year. Of the 6,851 who participated in the first part of the Time 1 questionnaire, 5,455 also completed the second part. 3,885 respondents then completed the questionnaire at Time 2 that included the identity questions, producing a retention rate of 71%. Attrition over time is a concern. Students who were engaged with school were likely to remain in the sample, biasing against school drop outs and frequent absentees. But Graham (2009) argues that the mechanisms relating to attrition are more consequential for internal validity than the simple number of missing cases. In this sample the majority of the attrition came from students not being in class on the day the survey was administered. Given the many reasons that students are not in attendance on any given day, bias due to systematic missingness should be minimal. Indeed previous analysis of the data reported no observable bias on the identity measures stemming from selective attrition (McFarland and Pals 2005).

Measures

Identity/Crowd. The definition of crowds and individual's membership in them was accomplished using the Social Type Rating procedure (Brown 1989). Focus groups were conducted with representative students to create an agreed upon list of the crowds that existed in their school. During the in-class questionnaire students were presented with the list of the crowds that the focus groups had compiled and asked "Which crowd would you

personally say that you belong to?” Responses to this question serve as a measure of professed identity. Students also were asked “Which crowd do you believe your *peers* would say you belong to?” The crowd identified in this question serves as the measure of perceived identity.⁵

These questions are one of the most significant advantages of using the given data set. Directly asking about their professed and perceived membership provides a more accurate measurement of identity than a researcher determined categorization. The use of student focus groups to create the list of identities ensures that the labels are meaningful to the respondents. Finally, the survey asking both professed and perceived identity is valuable because the process and mechanisms that lead adolescents to claim to be a different identity might be distinct from those that lead adolescents to believe their peers recognize them as a different identity.

The original responses contained over 30 unique professed and perceived identities. An analysis predicting changes into all of these categories would be problematic due to the resulting small cell sizes. Therefore, qualitatively similar identities were combined. For example, respondents claiming to be Popular were coded into the same category as respondents who claimed to be Popular-Nice and Jock. All three of these crowds have been shown to be similar in their substantive characteristics (see Milner 2004, Eder 1995). A similar consolidation process on all of the responses produces a set of 9 identities: Alternative, Normal, Deviant, Don’t Know, Ethnicity, Miscellaneous, Nerd, None, Popular-Jock. [For a full list of the individual identities belonging to each group see Appendix A.] The distribution of the crowds at each time will be discussed in the Results section as it pertains directly to Hypothesis 1.

Most of these identities are recognizable adolescent crowds. Two potentially contentious labels are None and Don't Know. It could be argued that respondents claiming these identities should be treated as missing. This study, however, conceptualizes these identities as meaningful classifications. First, the None group indicates an adolescent who claims to not be a part of any crowd. Such an adolescent has been called a Loner or Rebel (McFarland and Pals 2005). Conversely, None may represent adolescents who are rejected by other groups, perhaps labeled Isolates (Brown 1990). In either case, these adolescents have a distinct identity, being identified by their lack of identity, and therefore are treated similarly to the other crowds. Second, although the Don't Know respondents might not comprise a clear adolescent group, they are important to the analysis. These adolescents have not been able to claim a particular identity or cannot determine what identity their peers believe they are. This uncertainty may indicate a disruption in the identity process and determining if particular adolescents are more likely than others to experience this identity ambiguity could be an important finding.

Achieved Characteristics

Academic Achievement. The measure of academic achievement comes from students' self reported GPA. Students were asked "Which statement best describes your grades so far," with 9 possible response choices being: mostly A's, about half A's and half B's, mostly B's, etc. These reports were coded on a numerical scale such that mostly A's corresponds to 4.0, about half A's and half B's equals 3.5, and so on. The final measure ranges from 0 to 4 with 9 categories. As shown in Table 3.1, it has a mean of just over 3.0, indicating that on average students report getting mostly B's. As with any self report measure there are questions of this item's response validity, but when comparing reported GPA to actual GPA obtained from

official records, research has found the correlation between the two measures to be as high as .82 (Donovan and Jessor 1985; Dornbusch et al. 1987).

Extracurricular Participation. Students were provided a list of 20 unique, school-sponsored extracurricular activities (e.g., basketball, school play, math club) and asked to check each one that they had participated in over the past year. Two separate measures of extracurricular participation are created from this question. First, a simple sum of the number of activities participated in is used to measure overall level of participation. The variable ranges from no activities to 11 activities and has a mean of 1.66. Second, a series of dichotomous variables are created to indicate whether the individual participated in various types of activities. Following Lamborn and colleagues' (1992) classification, the variables indicate if the respondent participated in glory sports (basketball, baseball, cheerleading, or football), other sports (soccer, wrestling), leadership activities (student government), club activities (art club, math club, debate team), and performance activities (school play, choir, band). The most common activity is other sports (44%), and leadership activities are the least common (10%).

Deviant Behavior. The data include 15 items of deviant behavior. For each item students were asked how frequently they had done the given behavior over the past year. The response choices were never, once or twice, several times, and often. From the original 15 items, two separate scales are created because previous analyses of the data have shown that the items more accurately represent two underlying constructs rather than a single measure of deviance (Erickson, Crosnoe, and Dornbusch 2000). The first index represents frequency of substance use and contains five items asking if the student bought alcohol, drank alcohol, used cigarettes or chewing tobacco, smoked marijuana, or used any illicit drugs. The scale

ranges from 1 to 4 and has a mean of 1.49, which shows that most adolescents report only a minimal amount of substance use.

The second index of deviant behaviors measures the level of delinquent acts the respondent committed and includes 7 items: purposely damaged school property, taken something of value from another person, used a phony ID, ran away from home, got in trouble with the police, carried a weapon to school, or started a physical fight at school. Again the measure ranges from 1 to 4 and has an even lower mean, 1.14, than the substance use measure. Most adolescents report not having committed any of these delinquent acts.

Ascribed Characteristics

Parent Education. The measure of parental education comes from the question “What is the highest level of education your [Mother / Father] has obtained?” Response choices for this question were: some grade school, finished grade school, some high school, finished high school, some college or a two-year degree, four-year college graduate, some school beyond college, or professional or graduate degree. For respondents in two parent families the highest parent education level is used, whereas for cases in single parent families, or cases who only reported the education of one parent, the education of the available parent is used. The variable ranges from 1 to 8, and the mean of 5.5 indicates that the average level of parent education attainment is having some college or two-year degree.

Additional measures of socioeconomic status would be desirable, especially a report of parent income. But such information is difficult to ascertain reliably from adolescent respondents. Further, parent education has been shown to be an accurate indicator of SES and is the most widely used measure of SES in studies of adolescents (Ensminger and Fothergill 2003).

Gender. Female (coded 1) is a dichotomous measure of self-reported gender. The sample is evenly divided by gender, 52% female and 48% male.

Grade. Age is measured by the respondent's grade. It is entered as a set of dummy variables with 11th grade (the oldest) serving as the reference category. There is a relatively even proportion of respondents in each grade, with only slightly less in the 11th grade.⁶

Analytic Strategy

A mixed methods approach is used to test the stated hypotheses. The first step includes a detailed examination of the distribution of crowd membership at Time 1 and Time 2, specifically focusing on the amount and type of change between surveys (Hypothesis 1). Next, a series of logistic regressions is used to estimate changing into each identity at Time 2 (Hypothesis 2). Movement into each identity is estimated separately, with each model using an "at-risk" sample of adolescents who were not in the given identity at Time 1. Changing to a "Miscellaneous" identity is not estimated because less than 1% ($n = 20$) of the sample takes on this identity, prohibiting reliable estimates. Respondents reporting this identity are maintained in the analyses (i.e., coded 0) of becoming each of the other identities. The regression predicts who, from the eligible sample, reports being that identity at Time 2. Therefore, each model has a slightly different sample size, determined by the size of the crowd at Time 1. These models assess which characteristics or behaviors influence the likelihood of each specific identity change. Following these estimations, each of the significant variable's predicted probability is calculated to allow for a comparison of the magnitude of influence between achieved and ascribed characteristics (Hypothesis 2).

The second part of the analytic procedure uses Qualitative Comparative Analyses (QCA) to specifically evaluate what combinations of factors lead adolescents into the Normal

identity (Hypothesis 3) (Ragin 2000, 2008). Unlike regression models, which consider the unique effect of each factor on group membership controlling for all other included factors, QCA focuses on how factors configure in different ways to predict group membership. QCA is especially advantageous for this specific hypothesis because it seeks to understand how the combination of multiple characteristics is associated with movement into the Normal identity. Further, QCA permits equifinality, allowing for multiple combinations of characteristics to lead to a similar outcome. As discussed, the paths into the Normal crowd may vary based on the adolescent's prior crowd (e.g., Nerds versus Jock), and a QCA strategy permits discovering such diversity.

The first step in the QCA procedure is to determine which factors should be included in the analysis. One of the constraints of QCA is that it cannot effectively handle large numbers of predictors. To address this challenge, the logistic regression models determine which factors most consistently, net of the other characteristics, increase the chances that an individual becomes Normal. The predictors that are significant in the logistic regression prediction of who becomes Normal are entered into the QCA analysis to examine how they operate in combination. The parsimonious solution shown in the regression analysis is used to examine potential complexity with QCA (similar to procedure used by Vaisey [2007]).

The next step in any QCA analysis is to determine how membership in each individual set (e.g., high extracurricular participation) is defined. (The term "set" is used in QCA rather than "variable" to emphasize that each variable has been transformed to represent the individual's membership in a given condition, for example, his/her membership in high deviance. The combination of individual "sets" -- e.g., high substance use *and* high extracurricular participation -- is then referred to as a "configuration.") All variables used in

QCA, including the dependent measure, must be coded dichotomously, 0 and 1, indicating membership in or out of a given set. Fortunately, Hypothesis 3 is based on the configuration of factors at or below the average combined with factors being above average. Thus all of the continuous measures included in the QCA procedure are dichotomized to indicate being above average on that measure (coded 1) versus being at or below average on that measure (coded 0).⁷ The choice of splitting the measures at the mean, therefore, is not arbitrary but rather driven by conceptual considerations.

Once the variables have been transformed into sets, each case is assigned to one of the possible combinations of sets (i.e., configurations). This process is accomplished by determining which configuration each individual fits into, given his/her score on all of the specified sets. For example, someone who has high parent education (S) *and* participates in a greater than average number of activities (A) *and* has below average substance use (U) would belong (i.e., coded 1) to the configuration represented as S·A·u.⁸ Placing all of the cases into their appropriate configurations allows for a description of the distribution of respondents' experience of the predictor sets.

After respondents' membership in each set and configuration is determined, the association between each configuration and the outcome variable is calculated. In QCA this determination is accomplished with a conditional probability (Probability $Y=1|X$; where X = membership value in a given configuration). This probability directly represents the proportion of respondents who belong to the configuration who also belong to the outcome set. More abstractly, this figure can be interpreted as the *consistency* in the data with the assertion "X is a subset of Y." For example, a consistency score of 1 would indicate that

whenever a person belongs to the given configuration he/she also belongs to the outcome set (i.e., full sufficiency).

Finally, the configurations that are probabilistically the most consistent with the outcome are determined. Ragin (2006) suggests selecting configurations with consistency values of .8 or higher for such conclusions. But using this figure is somewhat arbitrary and is subject to the distribution of both the predictor and outcome variables. Specifically, this benchmark is unreasonable when the average sample probability of being in the outcome is very low. In such cases it is uncommon for any configuration to have more than 80% of its members also in the outcome. For this analysis, therefore, consistent configurations are determined with a statistical F-test that compares the inclusion of X in Y to the inclusion of “all other” X’s in Y (similar to the procedure used by Roscigno and Hodson [2004]). If a given configuration’s inclusion in Y is significantly greater than every other configuration’s inclusion in Y, the members of that configuration are more likely to manifest the outcome than if they were not in that configuration.

Then Boolean algebra is used to simplify these final significant configurations. For example, if the configurations $S \cdot a \cdot U$ and $s \cdot a \cdot U$ both were determined to be probabilistically consistent with Y, the solutions could be reduced to just $a \cdot U$ (because membership in Y occurs whether one has parents with high or low education [S]). Then, the earlier formula (Probability $Y=1|X$) is used to determine the consistency of the final reduced solution set, which indicate how efficient the reduced configurations are in producing the outcome.

Finally, the effectiveness of each of the final configurations is assessed by calculating their *coverage* with the equation: Probability $X=1|Y$ (Ragin 2006). This probability then is interpreted as the extent of membership in Y that is accounted for by the configuration X. A

coverage score of 1, for example, would indicate that all those individuals in the outcome set also belong to the predictor configuration. Coverage is used as well as consistency because a given set or configuration may be highly consistent with the outcome but may not empirically include many people, and thus may not be substantively meaningful. For example, the set indicating whether a parachute failed to open while skydiving would be highly consistent with death (i.e., most people belonging to this set would also belong to the set defined by death), but this finding might not be very helpful in determining the most common or meaningful pathways to mortality in a given population (i.e., not many people belonging to the set defined by death would also belong to the set of having a parachute not opening). When there are multiple solutions that are deemed probabilistically sufficient to produce the outcome, one can further partition their coverage into shared and unique components. To illustrate this, let us assume that both $S \cdot A$ and $A \cdot U$ are both highly consistent with becoming Normal. If respondents who fit into the configuration $S \cdot A$ are also very likely to be in the configuration $A \cdot U$, the unique coverage of the two solutions will be low, because their membership overlaps significantly. On the other hand, if these two groups represent different individuals, we would find high levels of unique coverage.

RESULTS

Table 3.2 displays the distribution of professed (i.e., the crowd adolescents claim) and perceived (i.e., the crowd adolescents believe their peers place them) identity at Time 1 and one year later at Time 2. The two measures of identity show relative similarity. Crowds make up about the same portion of the sample whether one uses professed or perceived identity, with Normals being the largest group (between 30% and 37% of the sample). Popular-Jocks,

None, and Ethnicity are the only other crowds that comprise 10% of the sample or more in both years.

The distribution of crowds over time reveals a high level of stability. As shown in Columns 1 and 2 in Table 3.2, no crowd increases or decreases its relative membership by more than 4% over the one year. Figure 3.1 displays these distributions and shows that, for both measures of identity, the relative make up of the sample by crowds is virtually identical across time points. The largest increase is the Don't Know group, which gains about 3% for both professed and perceived identity, and the most sizeable decline is the Normal crowd, which only loses 2 and 3% for each measure. These overall distributions indicate that the relative make up of adolescent crowds is quite consistent over time, supporting Hypothesis 1, which predicted greater stability than change in adolescent identities

Yet, column 3 of Table 3.2 suggests a different story. These columns show the percent of each crowd, from Time 1, that report being in a different crowd at Time 2. The majority of almost every crowd changes identities by Time 2. The most likely crowd members to exit (beside Don't Know) are professed Nerds (76%), perceived Alternatives (70%), and professed Deviants (64%). Conversely the least likely crowd members to change are perceived Normals (35%), professed Ethnicity (42%), and perceived Ethnicity (47%). Forty-eight percent of the entire sample reports a change in identity across the two time points, for both professed and perceived identity.

This virtually even split between adolescents who change and those who maintain identities makes it difficult to determine whether adolescent identities should be characterized by change or stability. The overall distribution of identities is consistent over time. The number of slots available for each given identity does not change, but the

adolescents filling those slots do. There is not a major migration of adolescents into one or two identities over time, but rather there is a high level of switching, with replacement, among crowds. This pattern of movement contradicts Hypothesis 1 and supports the idea that adolescents may be trying on several different identities throughout high school.

The degree of change, however, could be crowd specific in that the percent of identity change could vary by Time 1 identity. Table 3.3 displays the proportion of each Time 1 crowd that belongs to each crowd at Time 2. Across all crowds and both measures of identity, the most common path is to remain in the same identity. Scanning across each row, one sees the most popular change for most adolescents' professed identity is to become Normal followed closely by None. The only identity that violates this pattern is Deviant. The second most frequent change for adolescents in the Deviant identity at Time 1 is to become a Popular-Jock by Time 2. The general pattern is similar for perceived identity. Most adolescents who change believe that their peers see them as either Normal or None at Time 2. Again, Deviants do not follow this trend, as their second most frequent change is to Popular-Jock. And for perceived identity, Popular-Jocks second most frequent movement is into the Deviant crowd.

These aberrations notwithstanding, the dominant trend is for adolescents to either maintain their identity and if they do change, they most commonly take on a "general" identity (i.e., Normal or None). In fact, combining these three percentages (i.e., staying the same, becoming Normal, and becoming None) accounts for between 66% and 85% of each crowd's identity pattern over the one year. In other words, only around 30% of adolescents change into a substantively specific crowd.

The final row for each measure of identity in Table 3.3 indicates the proportion of the eligible sample (i.e., not in the given identity at Time 1) that becomes each identity by Time 2. Of adolescents who were not Normal at Time 1, 19% become so in their professed identity and 16% do so in their perceived identity. No other identity change has an average probability greater than 15%. These findings cast doubt on the idea that adolescents try on numerous, substantively-meaningful, identities. Rather, the majority of adolescents either are stable in their identity or move to a non-specific identity.

Predicting Identity Change

Even if it is the less common path, the second objective of this analysis is to examine factors that increase the likelihood of adolescents taking on each identity, specifically comparing ascribed to achieved characteristics. Table 3.4 presents the results from the logistic regression analyses predicting who becomes each professed identity, and Table 3.5 shows the findings from the perceived identity models. As detailed above, each model has a different sample because each one is estimated on “eligible” respondents (i.e., adolescents not in the outcome identity at Time 1). For example, there were 55 Alternatives at Time 1, making the at-risk sample 2,151 (2,206 - 55). As shown, all the models control for adolescents’ Time 1 identity.

Among the ascribed characteristics, across both types of identity, gender and parent education have a significant influence on becoming at least two identities. Females are significantly less likely than males to become a Deviant ($b = -.680$) or a Nerd ($b = -1.343$), both for professed and perceived identities. Having parents with more education significantly decreases the likelihood that an adolescent becomes Normal on both measures of identity ($b = -.139$ and $b = -.110$) and Ethnicity ($b = -.210$) as a perceived identity. Surprisingly,

socioeconomic standing does not influence the likelihood of becoming a Deviant, a Nerd, or a Popular-Jock. Most studies have pointed to SES as a primary factor in the hierarchical ranking of adolescent identities, but the current analyses does not support this conclusion.

The achieved characteristics display several noteworthy relationships with becoming each type of identity. First, academic achievement does not have a significant impact on adolescents changing the identity that they claim, but it does influence the likelihood that they change the identity they believe their peers give them. Specifically, having a higher GPA decreases the likelihood that an adolescent becomes a Deviant ($-.362$) and increases the likelihood that an adolescent becomes a Nerd ($.566$) in their perceived identity. Therefore, academic achievement may not change adolescents' held identities, but they realize it does influence how their peers see them.

Participating in a "glory sport" (i.e., baseball, basketball, cheerleading, or football) is a particularly influential predictor. As expected it increases the likelihood of becoming a Popular-Jock for both professed ($b = .947$) and perceived ($b = .964$) identity.⁹ Such participation decreases the chance that an adolescent moves to the Alternative ($b = -1.220$) group in his/her perceived identity. Perhaps the most intriguing relationship is that playing one of these sports increases the likelihood that an adolescent takes on Ethnicity ($b = .708$) as a professed identity. Being a member of one of these athletic teams has become a part of what it takes for some adolescents to claim Ethnicity as their identity. Thus, there is an overlap between an achieved characteristic with an identity that is often considered solely ascribed.

For both professed and perceived identity, participating in a performance (i.e., school play) activity increases the likelihood that an adolescent takes on the None identity ($b = .766$

and $b = .975$). This positive relationship supports the perception of this crowd as a place for loners or rebels; adolescents who reject the entire high school crowd system. Participating in performance activities often is associated with creative and novel thinking, which may lead an adolescent to take on an individualist identity. But the significant positive relationship between participating in club activities (e.g., chess team), which are normally devalued in modern high schools, and becoming None ($b = .571$ ($p < .05$) for perceived and $b = .426$ ($p < .10$) for professed) contradicts this “loner” interpretation. Some adolescents claiming to have a None identity may be doing so because they are forced into isolation. Most likely this identity consists of both adolescents who actively reject other possible identities and adolescents who are prohibited from taking on other possible identities.

Substance use is one of the most consistently significant predictors across the models, especially for professed identity. As illicit substance use increases the likelihood of an adolescent becoming a Deviant ($b = .993$) and a Popular-Jock ($b = .515$) also increases, whereas the likelihood of taking on Normal ($b = -.272$) and Ethnicity ($b = -.1.124$) as their professed identity decreases. A similar set of relationships exist between substance use and perceived identity, except substance use does not significantly impact becoming Normal for this measure of identity. Substance use therefore is a deterrent to adolescents claiming to be Normal but not to their perception of whether their peers define them as Normal.

Deviant behavior is only related to an increased likelihood of an adolescent taking on Ethnicity ($b = .906$ and 1.116) as their professed and perceived identity. Notably, participating in delinquent acts, such as starting a fight, stealing, and damaging property, is not related significantly to becoming a Deviant. The probability of taking on the Deviant identity stems more from substance use than from criminal behavior.

To summarize the pattern of significant relationships, Figures 3.2 and 3.3 show the absolute value change in the predicted probability of becoming each identity based on each of the significant predictors. For dichotomous variables, the change in predicted probability is calculated by subtracting the probability of being in the reference group from the probability of being in the indicator group, whereas for continuous variables (parent education, activity participation, substance use, and deviance) it is calculated by taking the difference in predicted probability between being at the 75th versus the 25th percentile of each variable. This type of calculation allows for a fair comparison of the magnitude of influence across variables.

Both graphs show that achieved characteristics (displayed with “line” bars) exert a stronger influence across all identity changes than do ascribed characteristics (displayed with “dotted” bars). For example, being at the 25th percentile of parent education versus the 75th percentile changes the predicted probability of becoming Normal in one’s perceived identity by 3%. A similar change on the number of extracurricular activities creates a difference in the predicted probability of over 10%.¹⁰ The one exception to this pattern is parent education’s impact on becoming Normal in one’s professed identity. This change in probability is greater than all but two of the achieved predictors of professed identity change. But when each predictor’s mean predicted probability difference across all models is calculated, not one of ascribed characteristics ranks in the top five largest average differences. Thus, the results support Hypothesis 2, which predicted that achieved characteristics would play a more influential role in the full range of possible identity changes than would ascribed traits.

Configurational Analysis of Becoming Normal

The final objective of this analysis is to understand how ascribed and achieved factors may work conjunctively to lead adolescents to become Normal. Relying on the regression analyses to help determine the most influential predictors, being female, parent education, GPA, number of activities, and substance use are entered into the QCA procedure. Each of these variables, except for GPA, has at least a marginally significant association with becoming Normal in the regression models. Academic achievement is included because of its consistently demonstrated importance in prior research. GPA may not be influential net of all the factors but still may act in concert with the other variables in leading adolescents to becoming Normal.

As described above, each of these variables are divided into dichotomous indicators of high and low membership in the given set. Because the goal is to assess if adolescents who take on the Normal identity are indeed average on all factors of interest, each measure is coded to indicate being above the mean on that measure. Substantively, high membership on each set indicates: parents with a college degree or more (45% of the sample), having a 3.5 GPA or above (46% of the sample), participating in 2 activities or more (46% of the sample), and having drunk alcohol or smoked marijuana (43% of the sample).

Next, each case is placed in its given configuration based on its combination of being high and low on each measure. Table 3.6a presents the distribution of cases (who were not Normal at Time 1) across the 32 possible (2^5) combinations. For example, 6.4% of the eligible professed sample is male, has parents with less than a college degree, has a GPA below 3.5, participates in 1 or no activities, and has not used alcohol or marijuana (f·s·g·a·u). This table shows a relatively even distribution of the sample across all of the possible combinations, highlighting the diversity among adolescents. There are not any dominant

combinations of these five factors. Rather a sizable portion of adolescents experience each of the possible high and low configurations.

The last column for each measure of identity displays the proportion of cases who experience the given configuration that also become Normal by Time 2. For example, only 3.9% of females who have parents with a college degree or more, have a high GPA, participate in numerous activities and use substances (F·S·G·A·U) become Normal in their professed identity. Conversely, 40% of females who have parents with a low education, have a high GPA, do not participate in many activities, and use substances (F·s·G·a·U) become Normal in their professed identity by Time 2.

The final step in the analysis is using the previously described tests to determine which configurations most consistently lead adolescents into a Normal identity and logically reducing those configurations. Fifteen configurations for professed and 14 configurations for perceived Normal identity passed the test (i.e., have a higher proportion of members in the outcome than the proportion of cases not in the given configuration have in the outcome).

The reduced solution set for each measure of identity is shown in Table 3.6b. For professed identity, there are seven pathways that consistently lead an adolescent to becoming Normal. Two of these are distinct for males, three are unique to females, and the final two apply regardless of gender. Of all adolescents who become Normal in their professed identity, 57% belong to one of these configurations. And of adolescents who belong to one of the final configurations, 27% become Normal by Time 2.

The two paths for males indicate that to become Normal a male either has to maintain a high GPA and use substances but not participate in many activities (fem·GPA·act·SUB) or have parents with low education but attain a high GPA and participate in several activities

(fem·ses·GPA·ACT). These solutions support Hypothesis 3, which predicted that becoming Normal would involve more than simply being at the mean level on all pertinent characteristics. They show that for male adolescents taking on a professed Normal identity requires a unique combination of being above average on certain factors along with being at or below average on others. These unique combinations might push male adolescents away from other identities and into the Normal crowd. If for instance, a male adolescent had a high GPA, low activity participation and low (instead of high) substance use he may more consistently move to a Nerd identity or perhaps None. Conversely, if a male adolescent participated in many activities (along with a high GPA and substance use) perhaps he would have claimed a Popular identity. But given a balance between some conformity (GPA) and some deviance (substance use) male adolescents consistently assume a Normal identity. Thus, for males becoming Normal involves more than simply being average on all behaviors and characteristics.

The pathways including being female are quite different. The first includes low GPA with high activity participation and high substance use, while the other two include only low parent education and either a low GPA or participation in few activities. These final two configurations account for the largest portion of adolescents who become Normal, as shown by their high raw coverage (.226 and .242). They demonstrate that for females, becoming Normal actually involves being at or below the mean on the primary factors. The most sufficient characteristics for females becoming Normal are having parents with a low education and not engaging in school at high degrees (i.e., low GPA or low activity participation). These results contradict the expectations of Hypothesis 3, as they suggest that

taking on a Normal professed identity for females involves being at or below average on several behaviors and characteristics.

The final two configurations for professed identity show alternate paths to becoming Normal, regardless of gender. The first indicates that having parents with a high education and being below average on all the other measures (SES·gpa·act·use) consistently leads to becoming Normal. The second path, however, involves parents with low education, high activity participation, and high substance use (ses·ACT·USE). Collectively, the solution for professed Normal identity indicates there are some pathways to this identity that are indeed “average.” But there also are paths that lead an adolescent to take on a Normal identity that require a unique balance of multiple factors at high levels and others at or below the average.

The results for becoming Normal in one’s perceived identity support these interpretations. The total solution set accounts for a similar portion of adolescents who believe others classify them as Normal (54%) and is about as consistent, with 23% of the individuals in the final configurations believing their peers see them as Normal at Time 2. Notably however, only one final configuration (SES·gpa·act·sub) is the same between the two types of identity. The combinations of factors that consistently lead adolescents to claim to be Normal are different from those that lead to them to believe their peers recognize them as Normal.

Even though the exact combinations are different, they reveal relatively similar conclusions. For females to believe their peers see them as Normal, they need to either have a low GPA and not use substances (FEM·gpa·sub) or have parents with a low education and use substances (FEM·ses·SUB). For the total sample, there are three paths. The first is the same from the professed solution. The other two both involve attaining a high GPA and not

participating in activities along with either low parent education or high substance use (ses·GPA·act and GPA·act·SUB). Again these solutions appear to be pathways where the combination of variables prevents the adolescent from being placed in another identity. Having low parent education or using substances (combined with a high GPA and low activity participation) may keep adolescents from being in the Nerd identity. Or on the other hand, having a high GPA (along with low parent education or high substance use) could prevent adolescents from being categorized as a Deviant.

Collectively, the results from the QCA analysis support Hypothesis 3 and contradict the assumption that all adolescents who take a Normal identity do so because they could not make it into to any other crowd. Assuredly, several of the final configurations indicate adolescents who are average on the included characteristics, especially among the female specific configurations. But several other sufficient configurations involve a complex balance of characteristics and behaviors. Maintaining these mixed combinations may act as a buffer from being placed in other identities. The combination of contradictory characteristics (e.g., high activity participation along with high substance use and low GPA or high substance use along with high GPA and low activity participation) may prevent adolescents from taking on a marginalized identity, such as Deviant or Nerd. Therefore, there could be two unique types of Normal adolescents: adolescents who take on this identity because they do not meet the requirements to be in other identities (i.e., truly average) *and* adolescents who have “gotten into” the Normal category by avoiding a potentially devalued identity.

CONCLUSIONS

The objective of this study has been to explore stability and change in adolescent social type identities. These types of identities often are portrayed as being fluid, with

adolescents “trying on different hats” throughout their youth. Further, much existing research points to ascribed characteristics, primarily socioeconomic status, as the primary determinant of the crowd in which adolescents find themselves. This study argued, however, that there are significant barriers to movement between these identities, which should lead to high levels of stability across time. And when change does occur, it was predicted that the alteration would stem more from achieved characteristics than ascribed traits. The findings provide partial support for these predictions. A considerable percentage of adolescents report identity change over time, but most of the movement is to non-specific identities, not trying on a different type of identity. Achieved characteristics generally are more influential in predicting all possible identity changes. But when examined conjointly, ascribed characteristics play a crucial, combinatorial role in leading adolescents into a Normal identity.

Contrary to Hypothesis 1, almost 50% of adolescents report an identity change over the course of one year. Most of this movement comes from adolescents switching between crowds, as the overall distribution of crowds across the sample remains relatively stable over time. Rather than a few crowds growing in size, most crowds lose about half of their members who are then replaced by new constituents. Therefore, at the aggregate level the results suggest that adolescents are exploring several identities throughout their youth.

This conclusion is tempered, however, when identity changes are examined at the crowd specific level. Within each identity the most common path is to remain in the same identity. And among the members who do exit each crowd the majority move to one of the “general” identities, either Normal or None. Only a small percentage of adolescents actually move between substantively specific identities (e.g., Nerd to Alternative). Rather the results

indicate that such movements are highly unlikely, and most adolescents who change identities generally slip towards the center. Therefore, adolescent identities do experience change, but this analysis has demonstrated that the majority of this change is substantively moderate.

Despite the relative rarity of such significant alterations, examining the precursors of these movements was revealing. As predicted, achieved characteristics were more influential in predicting the range of possible identity changes than were ascribed characteristics. Especially noteworthy was the lack of significance of parent education in predicting traditionally high versus low status identities, specifically Popular-Jocks, Nerds, and Deviants. Previous research has placed adolescents' socioeconomic status as the preeminent factor in shaping the identity status hierarchy in high schools. Yet, the results demonstrate that achieved factors, specifically extracurricular activities and substance use, are more central in promoting or preventing adolescents' entry into these identities.

The change into each identity had a unique set of predictors, suggesting that each identity has different requirements for entry. These findings question the utility of trying to predict overall identity change during adolescence. In fact, when such models were estimated on the current sample, several of the characteristics and behaviors that were influential in predicting specific identity changes dropped from significance. To understand what leads to adolescent social type identity change studies should account for the type of identity to which the adolescent is moving. The failure to do so may mask substantively important relationships.

Furthermore, isolating specific identity changes showed that dissimilar factors may impact the likelihood of a similar change, in turn revealing nuances about particular

identities. Most notably, the results indicated that the None crowd may not be a uniform identity. This group has been considered a “loner” identity and conversely termed an “isolate” identity. The finding that being in a performance activity and being in a club activity significantly increased the likelihood that an adolescent would move into the None group suggests that it is best characterized as both. Some adolescents may be claiming this identity as an active rejection of belonging to a particular crowd, while others are forced into this group due to others’ rejection. Future research should continue to examine what this None group means and how adolescents both construct and manage its definition as an identity.

Additionally, the set of predictors acted dissimilarly depending on whether professed or perceived identity was being considered. Academic achievement, for example, had no influence on the type of identity that adolescents claimed for themselves. But GPA had a significant influence on the likelihood that adolescents believed their peers defined them as a Deviant or a Nerd. Similarly, participating in a leadership or performance activity did not influence the likelihood of claiming Popular-Jock as a professed identity, but both types of participation lowered the chances that adolescents believed their peers classified them as such. Thus, adolescents are able to change their own claimed identity, regardless of what they believe the social requirements for that identity to be (e.g., they can self identify as a Nerd regardless of their GPA). They may understand that certain attributes are necessary for others to recognize them as holding a particular identity but simultaneously not accept these characteristics as necessary for professing that identity. Research should continue to examine the differences and similarities between these measures of identity and how adolescents rectify the duality of their self proclaimed and socially recognized identity.

The QCA analysis of becoming Normal produced two main conclusions. First, although achieved characteristics played a more influential role than ascribed traits when estimated as independent factors, the two sets of predictors worked in concert to lead an adolescent into the Normal identity. All but one of the paths that consistently produced a change into the Normal crowd involved a combination of ascribed and achieved characteristics. Specifically, parent education provided a counter-balance to the achieved characteristics. If an adolescent had parents with high education, then to become Normal this trait must be combined with low levels of extracurricular participation, academic achievement, or substance use. Conversely when adolescents had parents with low education, they had to have high levels of one of these achieved traits to move into the Normal identity.

Second, there are two dominant avenues leading to the Normal identity. The first path involves combinations of being average on academic achievement, activity participation, and substance use. For both genders this full average combination still needed to include parents with above average education to consistently lead to a Normal identity. But for females only, there are several paths that do involve all of the factors at average or lower levels. These consistent pathways that included a majority of factors at or below the average support the presumption that being Normal is a catch-all classification for average adolescents.

The other main pathway, however, qualifies this generalization. There were several configurations leading to becoming Normal that involved complicated mixtures of some factors above average levels and others at or below the average. Primarily, the results suggest that these combinations prevent an adolescent from taking on a typically low status identity. For example, the combination of low parent education and high substance use would most likely be indicative of a Deviant adolescent. But when this configuration is combined with

high academic achievement, the adolescent is more likely to become Normal. Therefore, becoming Normal is not as simple as actually being average on all pertinent characteristics. Rather, just as other identities require distinctive combinations of factors for entry, so too does becoming Normal. The goal of future research should be to investigate whether adolescents actually see Normal as a unique categorization or if they perceive it to be a non-group. Doing so will show whether adolescents become Normal as a preventive step (i.e., not being put in a low status group) or as an active identity assumption.

This study has several limitations that should be mentioned. First, the data come from a local sample, preventing generalizability. This concern is heightened by the fact that the schools were chosen based on specific characteristics (lower income neighborhoods with relatively high racial diversity). Some of the ascribed factors may not have been influential in predicting identity change because of the attenuated variation on these characteristics. Also, the study would benefit from following the participants over a longer time span. Although there is limited movement over a one year period, perhaps more identity changes would be observed if a cohort was followed through its high school career. It would have been helpful to have a more complete measure of the adolescents' socioeconomic standing. Relying on parent education alone could be problematic. Future studies should include interviews with parents to attain more complete socioeconomic indicators. Doing so will further elucidate the relationship between socioeconomic status and adolescent identity change.

Attrition and missing data also could be cause for concern. Because it was a school-based study, no effort was made to follow students who moved or were not present on the day the survey was administered. The adolescents who participated in the follow up were significantly different on key variables. Specifically, adolescents who were lost to attrition

were older, had lower academic achievement, used substances more frequently, and were more deviant. But parent education, gender, extracurricular participation, and Time 1 identity were not significantly related to the likelihood of being in the analytic sample. Sensitivity analysis, utilizing a Heckman selection model, revealed that the selective attrition only significantly influenced the prediction of taking on the Ethnicity identity at Time 2. When adjustments were made to control for this selection, the presented conclusions pertaining to the Ethnicity identity were unchanged (all results available upon request).¹¹ Therefore, the attrition between waves does not significantly alter the primary findings of this study.

Despite these limitations, this study has helped shed light on the nuances involved in adolescent social type identity change. Numerous adolescents experience such change, but the process is far from being a completely open selection of identities. Very few adolescents make drastic identity changes. The limited nature of these types of changes may be due to the unique factors required to take on each specific identities. There is not a universal set of predictors for all identity changes. And even within identities there are multiple paths, involving unique combinations of both ascribed and achieved factors, that lead to the assumption of that identity. Focusing on specific types of changes has revealed a high level of complexity involved in adolescent identities and the mechanisms driving changes in those identities. Hopefully future research can expand on these detailed findings to further uncover how both psychological and social resources operate in leading to adolescent social type identity change. The central role these identities play in how adolescents orientate their lives makes such future research vital.

ENDNOTES

1. For this project the term crowd is used interchangeably with identity, and both refer to social type identities (Brown 1990).
2. Ascribed characteristics are traits with which a person is born (e.g., gender and race), whereas achieved characteristics are qualities based on the actions and behaviors of the individual (e.g., grades and dress). For the purposes of this paper, characteristics referred to as ascribed include parental SES, teen gender, and age, while achieved characteristics include academic achievement, extracurricular involvement, and deviant behavior.
3. Some may argue that Erikson's theory only applies to occupational or ideological identities, not social type identities. Although Erikson made conclusions about identity development in terms of the former types of identity, he saw experimentation with peer group identities as a crucial part of identity progression. And even if Erikson did not intend for his theory to be applied to social type identities, many studies have connected Erikson's theory to these identities (e.g., Cross and Fletcher (In Press); McFarland and Pals (2005); Youniss, McLellan, and Mazer [2001]). Therefore, examining Erikson's assumptions with these types of identities is valid and contributes to the existing adolescent literature.
4. The survey was conducted in 9 high schools, the other 3 in Wisconsin. But identity was assessed differently in the Wisconsin surveys, preventing the use of the Wisconsin sample in this study.
5. The present analyses treat professed and perceived identity as separate outcomes and do not focus on the relationship between the two. The consistency between these two measures and how it relates to any identity change has been examined elsewhere (McFarland and Pals 2005).
6. I do not include a measure of race as a predictor variable because all models include respondents' Time 1 identity as a control. As noted, one of these possible identities is Ethnicity, which is highly correlated with race. Including both measures in the model would cause significant collinearity problems. The Ethnicity identity measure is used to maintain the interpretability of the Time 1 identity dummy variable set.
7. This reasoning also explains why I use QCA versus Fuzzy Set QCA. Although dichotomizing variables does create a loss of information, the given hypothesis fits with a true QCA procedure.
8. By convention, each variable is represented by a single capital letter and its negation by the same lowercase letter. "S," for example, stands for being above the mean on parent education (i.e., SES) and "s" stands for being at or below the mean on parent education. For configurations, "." represents the Boolean "and." For example, S·A

indicates “high parent education and high activity participation” and S·a stands for “high parent education and low activity participation.”

9. This positive relationship exists even if Jocks are not included in the classification of Popular.
10. The changes in predicted probability across all significant predictors are relatively small (most are less than 10%). But these values should be interpreted in light of the low average probability of any given identity change. The average probability of moving into most identities is less than 10%. Therefore, the ratio of the difference in predicted probabilities to the average probability is sizable.
11. This adjustment was not used in the presented models because selection did not influence the vast majority of the models. And I do not present the adjusted Ethnicity models to maintain comparability across models. As noted, however, I only make claims in regards to factors that are predictive in both the selection adjusted and unadjusted estimations of taking on the Ethnicity identity.

Table 3.1. Mean, Standard Deviation, and Range of Predictor Variables (N = 2,206)

	Original Variable		
	Mean	SD	Range
<i>Ascribed Characteristics</i>			
Parent Education	5.50	1.58	1 – 8
Female	.52		0 – 1
Grade	1.94	.81	1 – 3
Freshmen	.35		0 – 1
Sophomore	.35		0 – 1
Junior	.30		0 – 1
<i>Achieved Characteristics</i>			
GPA	3.03	.75	0 – 4
Number of Activities	1.66	1.66	0 – 11
Glory Sport	.21		0 – 1
Other Sport	.44		0 – 1
Leadership	.10		0 – 1
Club	.25		0 – 1
Performance	.14		0 – 1
Substance Use	1.49	.68	1 – 4
Deviance	1.14	.29	1 – 4

Table 3.2. Distribution of Identity Membership and Change between Time 1 and Time 2 (N = 2,206)

	Professed Identity			Perceived Identity		
	1	2	3	1	2	3
	Percent of Sample Time 1	Percent of Sample Time 2	Percent of Time 1 Crowd Move Out	Percent of Sample Time 1	Percent of Sample Time 2	Percent of Time 1 Crowd Move Out
Alternative	2	3	60	3	4	70
Deviant	6	6	64	8	8	63
Don't Know	3	6	79	2	6	89
Ethnicity	10	11	42	12	12	47
Miscellaneous	2	1	59	1	2	53
Nerd	3	2	76	7	6	63
None	21	21	51	15	13	49
Normal	37	35	49	33	30	35
Popular-Jock	15	15	50	19	20	51
Total Sample	100	100	48	100	100	48

Table 3.3. Percent of Time 1 Identity Leavers in Each Time 2 Identity (N = 2,206)

				Time 2 Professed Crowd					
	Alternative	Deviant	Don't Know	Ethnicity	Misc.	Nerd	None	Normal	Popular-Jock
<i>Time 1 Professed Crowd</i>									
Alternative	40.0	9.1	3.6	9.1	3.6	3.6	16.4	9.1	5.5
Deviant	2.2	35.8	5.8	7.3	.7	.7	11.0	22.6	13.9
Don't Know	4.8	3.2	21.0	12.9	.0	1.6	14.5	27.4	14.5
Ethnicity	1.8	1.8	4.6	58.2	.5	.0	11.8	15.9	5.5
Miscellaneous	.0	5.4	5.4	5.4	40.5	2.7	16.2	21.6	2.7
Nerd	1.4	2.7	8.1	9.5	.0	24.3	18.9	23.0	12.2
None	3.4	3.8	7.2	5.3	1.5	2.6	49.5	18.7	8.1
Normal	2.2	4.0	3.2	5.0	.5	1.5	13.3	61.1	9.4
Popular-Jock	2.1	5.8	6.7	4.3	.6	.6	10.4	19.5	50.0
Percent of Eligible ^a that Becomes Crowd at T2	2.4	4.1	5.1	5.6	.8	1.5	12.8	19.2	9.0
				Time 2 Perceived Crowd					
	Alternative	Deviant	Don't Know	Ethnicity	Misc.	Nerd	None	Normal	Popular-Jock
<i>Time 1 Perceived Crowd</i>									
Alternative	50.0	8.3	3.3	6.7	1.7	1.7	13.3	8.3	6.7
Deviant	1.6	44.6	6.5	9.8	1.6	1.6	7.1	14.7	12.5
Don't Know	7.4	1.9	27.8	13.0	.0	3.7	13.0	16.7	16.7
Ethnicity	1.2	2.3	5.9	58.2	.8	4.3	7.4	14.1	5.9
Miscellaneous	.0	6.7	3.3	10.0	46.7	.0	13.3	20.0	.0
Nerd	2.4	1.2	6.7	3.0	2.4	39.4	15.2	20.6	9.1
None	4.3	3.7	7.1	9.9	1.5	4.3	36.6	21.9	10.8
Normal	2.9	4.7	4.3	5.4	.6	2.9	7.4	59.2	12.6
Popular-Jock	2.9	8.5	4.4	3.6	1.0	1.5	7.3	10.9	60.0
Percent of Eligible ^a that Becomes Crowd at T2	2.8	4.8	5.3	6.3	1.1	2.8	8.5		10.7

^aEligible meaning sample members who were not part of that group at Time 1.

Table 3.4. Logistic Regression Coefficients of the Prediction of Joining Each Professed Identity at Time 2

	Alternative	Normal	Deviant	Don't Know	Ethnicity	Nerd	None	Popular-Jock
<i>Ascribed</i>								
Female	-.522	.293	-.680**	-.115	-.178	-1.343**	.036	-.056
Grade (<i>T1st Ref</i>)								
Freshman	.579	-.254	-.017	.293	.018	.051	-.323	.188
Sophomore	-.180	.061	-.018	.077	-.194	-.196	.123	-.147
Parent Education	.109	-.139**	.094	-.069	-.117	.061	.001	.010
<i>Achieved</i>								
GPA	-.245	.051	.006	-.089	-.101	.266	.199	-.041
Number of Activities	.136	-.166	-.126	.311**	-.318	.142	-.082	.128
Glory Sport	-.717	.115	.199	-.421	.708*	-.048	.194	.947***
Other Sport	.118	.166	.030	-.669*	.320	-.455	.069	.071
Leadership Activity	-.331	-.047	-.441	-.976*	-.110	.070	-.269	.349
Club Activity	-.609	.2278	-.394	-.464	.550	.453	.426	-.112
Performance Activity	-.375	.218	-.616	-.507	.014	-.910	.776***	-.481
Substance Use	-.006	-.272*	.993***	-.026	-1.124***	-.082	-.025	.515***
Deviance	.492	.088	-.304	.390	.921*	.532	-.587	-.624
<i>T1 Crowd^a</i>								
Alternative		-.973	.234	-.112	.444	.514	.610	-.460
Deviant	-.133	.233		.571	.993*	-.677	-.028	.100
Don't Know	.837	.338	-.494		1.135**	-.159	.176	.535
Ethnicity	-.164	-.587*	-.616	.246		-16.719	-.100	-.413
Misc.	-15.805	-.110	.600	.503	-.097	.429	.133	-1.056
Nerd	-.427	.100	-.071	.921	.677		.278	.371
None	.421	-.226	-.074	.882**	.083	.412		-.035
Popular/Jock	-.079		.202	.790*	-.046	-1.095	-.202	
Constant	-4.132**	-.399	-4.359***	-3.162***	-1.367	-5.327***	-2.351***	-2.752***
Pseudo R-Sq	.052	.030	.107	.039	.068	.107	.031	.071
BIC	618	1462	793	994	962	443	1443	1210
N	2,151	1,384	2,069	2,144	1,986	2,132	1,735	1,878

Note. *p < .05, **p < .01, ***p < .001. Two-tailed test. Miscellaneous not estimated because less than 1% of sample is in outcome (n = 17), prohibiting reliable estimates.

^aNormal is the reference group, except in the model predicting becoming Normal in which Popular/Jock is the reference group. Because members of T1 crowd are eliminated from model of becoming that crowd at T2, stability coefficients are not estimated.

Table 3.5. Logistic Regression Coefficients of the Prediction of Joining Each Perceived Identity at Time 2

	Alternative	Normal	Deviant	Don't Know	Ethnicity	Nerd	None	Popular-Jock
<i>Ascribed</i>								
Female	-.390	.292	-.621**	-.150	-.039	-.916**	.127	.146
Grade (<i>T1st Ref</i>)								
Freshman	.118	-.259	.177	.007	.092	-.577	-.512	.143
Sophomore	-.352	-.018	.091	.004	-.062	.151	-.008	-.060
Parent Education	-.034	-.110*	.083	-.059	-.210***	.181	.067	.000
<i>Achieved</i>								
GPA	.007	.069	-.362*	-.037	.024	.566*	-.246	.075
Number of Activities	.283	-.272*	-.089	.322**	-.215	.097	-.149	.081
Glory Sport	-1.220**	-.013	.321	-.291	.314	-.360	-.061	.964***
Other Sport	-.011	.101	-.024	-.633*	.023	-.058	-.283	.162
Leadership Activ	-1.209	.421	-.058	-.455	-.342	-.494	-.479	.690**
Club Activ	-.811	.348	.234	-.314	.494	.109	.571*	-.267
Performance Activ	-.433	.446	-.545	-.455	-.158	.546	.975***	-.598*
Substance Use	.048	-.010	.931***	.075	-.838***	-.313	-.045	.286*
Deviance	.103	.109	-.156	.100	1.119***	-1.648	-.159	-.167
<i>T1 Crowd^a</i>								
Alternative		-.537	.103	.316	-.015	-.113	.543	-.543
Deviant	-.681	.143		-.370	1.062**	-.016	-.079	-.125
Don't Know	1.072	.318	-1.176		.919*	.216	.563	.417
Ethnicity	-.833	.012	-.658	.242		.483	-.005	-.773**
Misc.	-15.901	.448	.778	-.262	.461	-15.865	.529	-17.952
Nerd	-.169	.664*	-.932	.461	-.667		.870**	-.274
None	.433	.634**	-.173	.532	.523*	.251		-.005
Popular/Jock	.075		.438	-.065	-.210	-.727	.184	
Constant	-3.275**	-1.554***	-3.427***	-2.835***	-1.776*	-3.775**	-1.792***	-2.927***
Pseudo R-Sq	.053	.041	.113	.023	.081	.102	.056	.070
BIC	679	1390	851	1026	1002	625	1187	1285
N	2,146	1,486	2,022	2,152	1,950	2,041	1,881	1,794

Note. *p < .05, **p < .01, ***p < .001. Two-tailed test. Miscellaneous not estimated because less than 1% of sample is in outcome (n = 20), prohibiting reliable estimates.

^aNormal is the reference group, except in the model predicting becoming Normal in which Popular/Jock is the reference group. Because members of T1 crowd are eliminated from model of becoming that crowd at T2, stability coefficients are not estimated.

Table 3.6a. QCA Analysis of Becoming Normal at Time 2

Professed Identity			Perceived Identity		
	Percent in			Percent in	
Configuration	Configuration	Pr(Y X)	Configuration	Configuration	Pr(Y X)
f·s·g·a·u	6.4	.191	f·s·g·a·u	6.3	.140
f·s·g·a·U	5.9	.123	f·s·g·a·U	5.4	.100
f·s·g·A·u	2.7	.135	f·s·g·A·u	2.6	.051
f·s·g·A·U	4.5	.242	f·s·g·A·U	4.2	.145
f·s·G·a·u	2.5	.143	f·s·G·a·u	3.0	.222
f·s·G·a·U	0.9	.333	f·s·G·a·U	0.9	.385
f·s·G·A·u	2.6	.250	f·s·G·A·u	2.6	.077
f·s·G·A·U	1.5	.238	f·s·G·A·U	1.4	.143
f·S·g·a·u	3.4	.213	f·S·g·a·u	3.4	.196
f·S·g·a·U	2.7	.135	f·S·g·a·U	2.7	.150
f·S·g·A·u	2.0	.179	f·S·g·A·u	2.0	.138
f·S·g·A·U	3.0	.143	f·S·g·A·U	2.7	.125
f·S·G·a·u	2.9	.150	f·S·G·a·u	3.1	.130
f·S·G·a·U	1.7	.250	f·S·G·a·U	1.6	.167
f·S·G·A·u	5.5	.105	f·S·G·A·u	5.7	.083
f·S·G·A·U	3.3	.087	f·S·G·A·U	3.6	.113
F·s·g·a·u	6.4	.250	F·s·g·a·u	5.9	.230
F·s·g·a·U	6.1	.262	F·s·g·a·U	5.9	.216
F·s·g·A·u	1.9	.192	F·s·g·A·u	2.2	.188
F·s·g·A·U	2.1	.379	F·s·g·A·U	1.9	.250
F·s·G·a·u	3.3	.304	F·s·G·a·u	3.8	.304
F·s·G·a·U	1.1	.400	F·s·G·a·U	0.9	.214
F·s·G·A·u	3.8	.189	F·s·G·A·u	3.8	.125
F·s·G·A·U	1.6	.227	F·s·G·A·U	1.7	.240
F·S·g·a·u	2.7	.351	F·S·g·a·u	2.7	.275
F·S·g·a·U	2.5	.086	F·S·g·a·U	3.0	.133
F·S·g·A·u	1.2	.188	F·S·g·A·u	1.3	.211
F·S·g·A·U	1.7	.208	F·S·g·A·U	1.7	.080
F·S·G·a·u	2.7	.162	F·S·G·a·u	2.6	.053
F·S·G·a·U	1.2	.188	F·S·G·a·U	1.3	.200
F·S·G·A·u	6.6	.163	F·S·G·A·u	6.7	.141
F·S·G·A·U	3.7	.039	F·S·G·A·U	3.7	.073
<i>Total</i>	1,384	.192	<i>Total</i>	1,486	.157

Note: F – Female; S – SES (Parent Education); G – GPA; A – Number of Activities; U – Substance Use.
Analyses exclude T1 Average crowd members.

Table 3.6b. Reduced Solution Set for Becoming Normal at Time 2

Professed Identity (<i>n</i> = 1,384)			
Reduced Solution Set ^a	Outcome Consistency	Raw Coverage	Unique Coverage
fem·GPA·act·SUB	.278	.038	.038
fem·ses·GPA·ACT	.246	.053	.034
FEM·gpa·ACT·SUB	.302	.060	.019
FEM·ses·gpa	.264	.226	.019
FEM·ses·act	.275	.242	.075
SES·gpa·act·sub	.274	.087	.087
ses·ACT·SUB	.269	.136	.075
		Set Total Coverage	.574
		Set Consistency	.265
Perceived Identity (<i>n</i> = 1,486)			
Reduced Solution Set ^b	Outcome Consistency	Raw Coverage	Unique Coverage
FEM·gpa·sub	.230	.176	.129
FEM·ses·SUB	.226	.150	.137
SES·gpa·act·sub	.231	.090	.043
ses·GPA·act	.273	.150	.116
GPA·act·SUB	.225	.069	.034
		Set Total Coverage	.541
		Set Consistency	.232

^a15 configurations entered into reduction

^b14 configurations entered into reduction

Figure 3.1. Distribution of Identity Membership at Time 1 and Time 2 (N = 2,206)

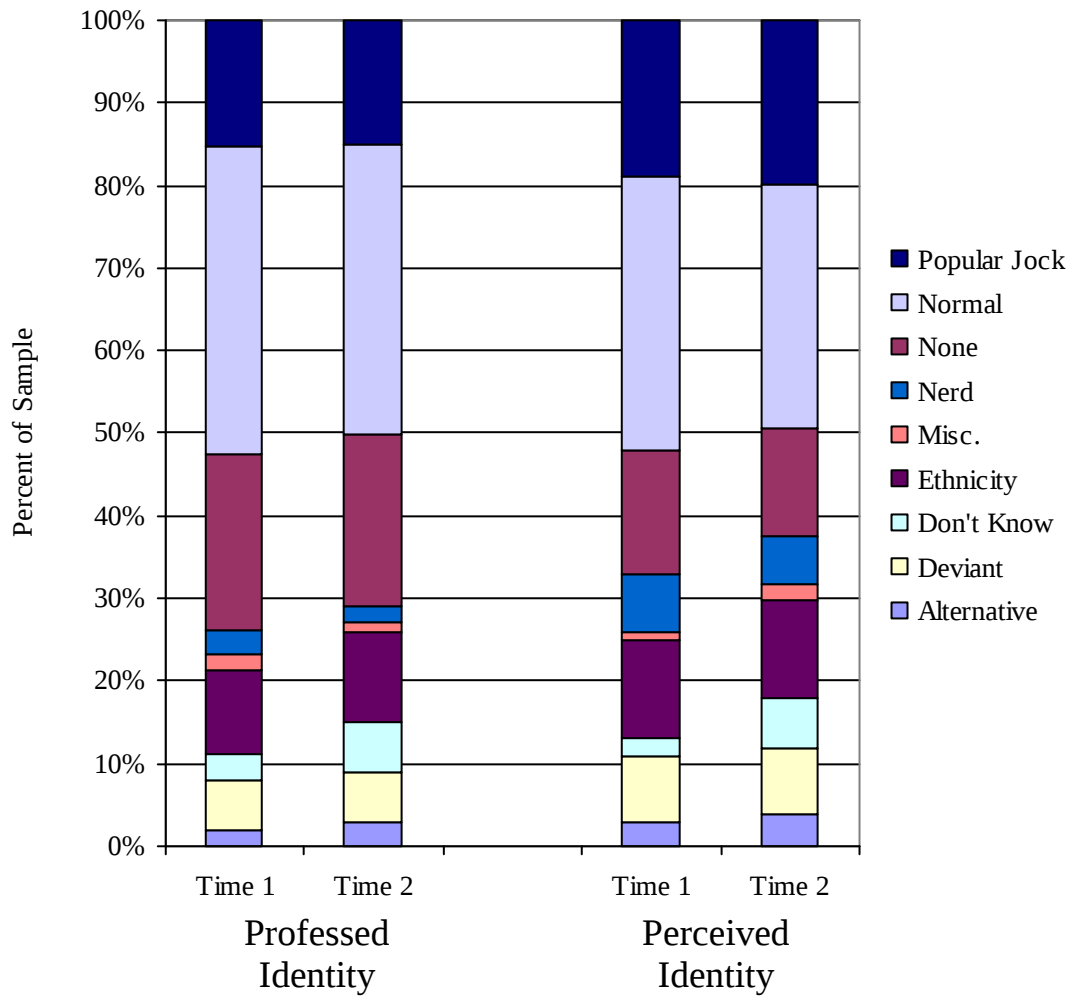
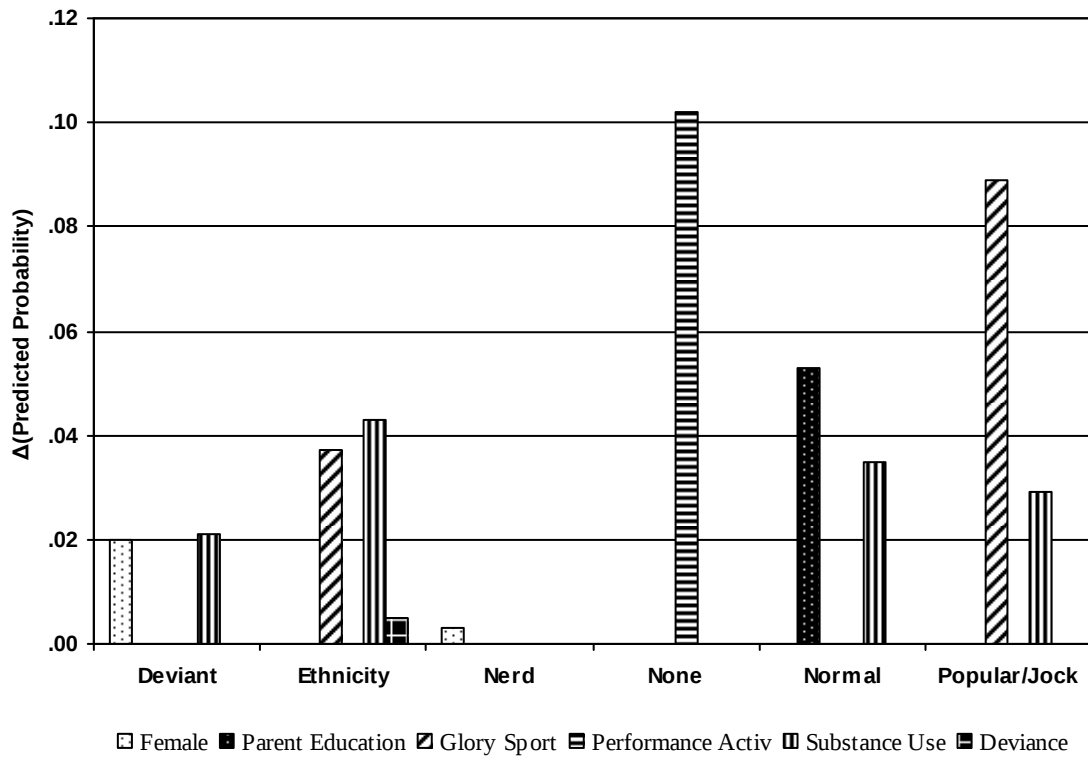
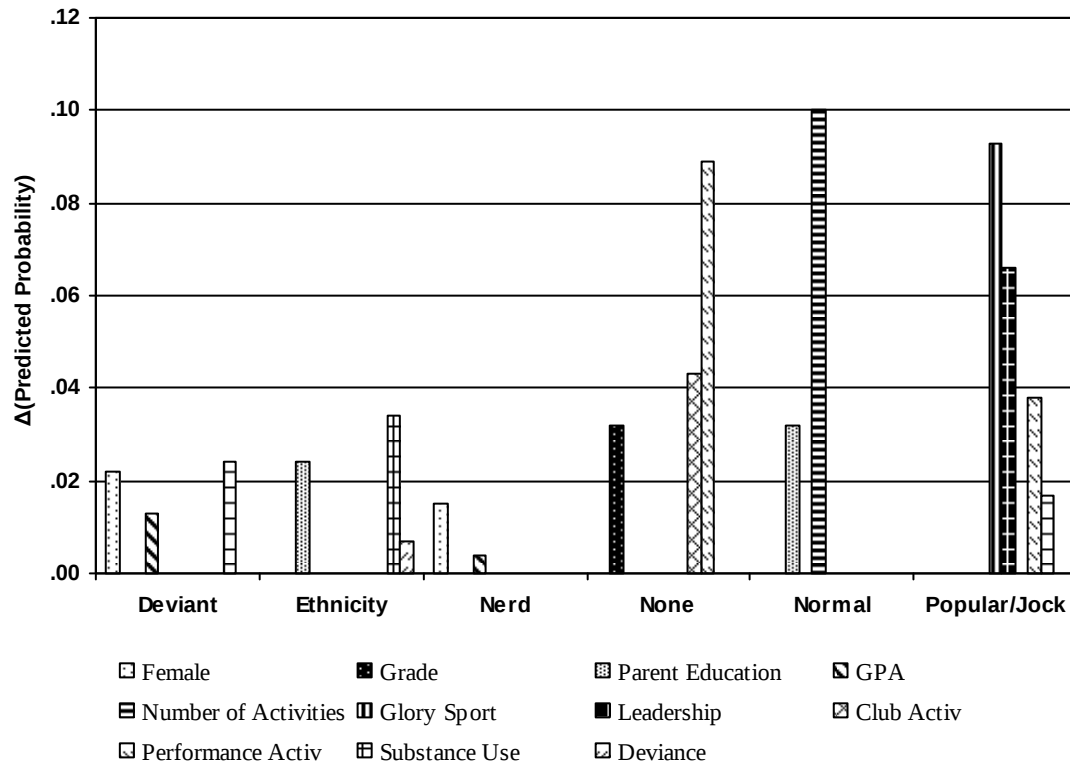


Figure 3.2. Absolute Value Differences in Predicted Probability of Joining Each Professed Identity at Time 2



Note: Only probabilities for significant coefficients shown. Probabilities for Alternative, Don't Know, and Misc. not shown. All differences are in absolute value. For continuous variables (parent education, substance use, and deviance) predicted probability difference is calculated by taking the difference between being at the 75th versus the 25th percentile.

Figure 3.3. Absolute Value Differences in Predicted Probability of Joining Each Perceived Identity at Time 2



Note:

Only probabilities for significant coefficients shown. Probabilities for Alternative, Don't Know, and Misc. not shown. All differences are in absolute value. For continuous variables (parent education, substance use, and deviance) predicted probability difference is calculated by taking the difference between being at the 75th versus the 25th percentile.

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CHAPTER 4

POPULARITY LOST: IDENTITY STATUS AND ITS CONSEQUENCES DURING THE TRANSITION TO ADULTHOOD

*Celebrated heads of state or
Specially great communicators
Did they have brains or knowledge?*

*Don't make me laugh!
They were popular!*

-- Galinda Wicked

ABSTRACT

Consensus holds that, when compared to students in high status crowds, students in lower status crowds tend to have lower grades, drink more alcohol, use drugs more frequently, and are not as emotionally mature. In turn, many scholars believe that such low status students will face difficulties as young adults. In this paper I contend that adolescents with high status identities are no different with respect to academic achievement or deviance than low status students. Further, relatively popular adolescents may struggle more in sustaining post high school academic and work trajectories than their less popular peers. Using a nationally representative, longitudinal data set, the National Study of Youth and Religion (N = 3,290), I use propensity score matching to isolate the impact of status on academic achievement, substance use and role stability. Results show that popular adolescents do not attain better grades than their less popular peers and they use alcohol and marijuana more frequently. This negative association extends into young adulthood as high

status in adolescence is a significant risk factor for heavy alcohol use and disrupted education and employment roles after high school. Collectively, the results reveal significant consequences for holding a high status identity in adolescence, many of which have a negative enduring impact on adult socioeconomic attainment.

INTRODUCTION

To date, research has assumed that high status identities in adolescence positively influence young adult academic and employment outcomes, while low status identities lead to negative consequences during the transition to young adulthood. For example, Eckert (1989) claims that schools are structured to help prepare high status “jocks” for success both in college and the business world, which in turn makes them less likely to deviate from these institutions’ norms and expectations. Conversely, low status “burnouts” are socialized to distrust institutions and rebel against them through heightened disengagement and delinquency. Similarly, Eder (1995) concludes that low status junior high students are likely to suffer serious emotional trauma, which inhibits proper development and results in difficulties for these adolescents’ adjustment to other settings. The assumption is that, when compared to students in high status crowds, students in lower status crowds tend to get worse grades, drink more alcohol, use drugs more frequently, and are not as emotionally mature. When this reasoning is linked to evidence showing that negative behaviors (such as deviance or low academic achievement) often continue and/or worsen in young adulthood (Kandel and Logan 1984; Newcomb and Bentler 1988; Welte, Zhang, and Wieczorek 2001; Yamaguchi and Kandel 1984), researchers generally conclude that low status students will face difficulties as young adults.

Although these conclusions make intuitive sense, their validity can be questioned. First, the theoretical foundation of this research may rely on faulty presumptions. Most in-depth studies of adolescence have found that the adolescent social world is based on distinctly different rules and expectations than the adult social world (Coleman 1961). The abilities needed and used to gain status in the adolescent world, therefore, may not be applicable in the adult world. By extension, youth who succeed in the adolescent status hierarchy may have difficulty adjusting to the new obligations and requirements of adulthood. Specifically, adolescents with high status identities in high school may have trouble successfully reestablishing an identity in different contexts (e.g., they may be less willing to relinquish an old identity), which may prevent them from adequately assuming the requirements of adult roles (e.g., worker, wife, etc.). In contrast, students who do not hold high status identities in adolescence may have less to lose from adjusting their identities, easing the transition to the new expectations of adulthood.

Second, there is little rigorous empirical support showing the continued harm of low status or the added benefit of high status adolescent identities into young adulthood. Eckert (1989) provides no systematic evidence of significant discrepancies between high status and low status adolescents' level of deviant behaviors (e.g., substance use, low academic success) or long term success (e.g., post-graduation employment stability). The studies that have empirically tested the relationship between status and negative behaviors have not found a consistently strong association (Hopmeyer Gorman et al. 2002; LaFontana and Cillessen 2002; Lease et al. 2002), have not accounted adequately for the endogeneity between the behaviors leading to differences in status and the outcomes of interest (Cillessen and Mayeux 2004; Prinstein and Cillessen 2003), and have not estimated the long term influence of

adolescent status (Eckert 1989; Eder 1995; Milner 2004). Although it is assumed that being in a low status group in adolescence is a “bad” thing, there is little direct empirical evidence to confirm this prediction.

Status in Adolescence

Before detailing specific hypotheses, an explanation of what is meant by “status” in adolescence is provided, as well as a detailing of the difficulties inherent in the study of status and its impact. In most studies of adolescence, and as is followed in this project, status and popularity are used interchangeably. Popularity, however, is a bifurcated concept. Sandstrom and Cillessen (2006) describe the two aspects of popularity as “sociometrically popular,” defined as being well liked by peers, and “perceived popularity,” defined as being in the leading group and well known by peers.

For the purposes of this project, I rely on a measure of perceived popularity for several reasons. First, using growth curve modeling, Cillessen and Borch (2006) found perceived popularity to be a more stable trait than sociometric popularity. Because one of the primary goals of this project is to investigate the longitudinal impact of popularity, using a less volatile measure of status helps preserve the validity of any observed relationships (i.e., using a measure that is susceptible to contemporaneous change would provide more room for error when predicting future outcomes).

Further, perceived popularity is consistent with the general sociological understanding of status, which usually is defined as a location in the social structure accompanied by certain rights and obligations (Merton 1957, Weber 1958). Status is a social marker that affords individuals who possess it power, control, or other benefits. These advantages are based on the holders believing they have a superior position *and* others acting

in a way that reinforces that perception, neither of which are strongly related to likeability. The theoretical foundation for this study, as detailed below, stems from this definition of status. “Popular” and “high status” are thus conceptualized as high perceived popularity.

The inherent difficulty in studying the impact of having high status on any outcome is that factors predicting the outcome may also be related to high status. For example, studies have shown that participation in sports is positively related to high social status (e.g., Garner et al. 2006) *and* to academic achievement (e.g., Eccles et al. 2003). These relationships create difficulties in determining if status is uniquely influencing academic achievement or if the observed relationship is the result of status’s endogenous relationship with sports participation. This paper addresses this complication both conceptually and methodologically, the latter of which is detailed in the Analytic Strategy section below.

Previous research contends that status has emergent properties that influence adolescent outcomes, such as achievement and deviance. Weber (1958) asserts that certain characteristics, such as wealth, are required to attain high status, but then status is the mechanism providing individuals with benefits and rewards. For example, status determines who is allowed entry into elite society events and social clubs, not wealth alone. This process is supported in studies of adolescents that show status is significantly associated with outcomes even when accounting for characteristics that are precursors of both status and the behavior in question. For example de Bruyn and van den Boom (2005) found that “dressing hip” was positively correlated with popularity and self-esteem among junior high students. Yet, being popular still exerted a significant positive influence on self esteem even when the influence of being fashionable was controlled.¹ Just as high status can influence who becomes a member of a country club (net of the wealth that lead to that status), popularity in

adolescence can influence outcomes net of the behaviors that produced that popularity. This theory and research suggests that status, while endogenous to some degree, has significant implications for psychosocial development.

Adolescent Identity Status and Concurrent Achievement and Deviance

Most studies predicting that low status adolescents have more struggles in early adulthood than high status adolescents presume differences in the two status groups' adolescent behaviors. That is, low status adolescents participate in delinquent behaviors at higher levels and achieve at lower levels in the classroom than do their higher status counterparts (Eckert 1989; Garner et al. 2006). The difference in contemporaneous measures of deviance and achievement by status, however, has not been empirically validated. I expect that being in a higher status crowd does *not* predict institutional measures of achievement (e.g., grades) (Hypothesis 1), and status is *not* related to individuals' level of deviant behavior (e.g., substance use) (Hypothesis 2).

Some prior research has shown a positive, linear relationship between status and achievement, concluding that high status youth are the most highly academically achieving adolescents. LaFontana and Cillessen (2002) found, in a longitudinal study of junior high students, a significant, positive impact of popularity on academic achievement (see also, Lease et al. [2002]). Yet there is also research that calls this beneficial relationship between status and achievement into question. De Bruyn and Cillessen's (2005) study of high school freshman females found two distinct groups of popular students. The majority of the girls in the first group were all high achieving but the girls in the second group were more likely to be disengaged from school (see also De Bruyn and Cillessen [2006]). They also showed that, across the whole sample, popularity was negatively related to attentiveness and positively

associated with work avoidance, but there was *not* a significant relationship between popularity and GPA. That is, the most popular girls were the least likely to display behaviors consistent with high achievement even though their actual success was not impacted by this lack of dedication. Given that much of the evidence estimating the association between status and academic achievement is based on small, local samples, using a rigorous quantitative approach with a large, nationally representative sample further elucidates the nature of this relationship.

In terms of deviance, research has shown that some low status adolescents participate in deviant acts (including substance use) more than adolescents with high status (Coleman 1961; Hirschi 1969; McDonald 1999). In a longitudinal study of the National Study of Adolescent Health data, Kreager (2004) found that students with the least peer attachment and who experienced numerous negative encounters with peers (both signs of low status) were more likely to commit high levels of delinquent behaviors. Additionally, through a series of in-depth interviews with low status Australian youth, McDonald (1999) discovered that low status adolescents not only committed numerous deviant acts, they took pride in their ability to do so (i.e., they looked down on those with higher status for “conforming” to societal expectations).

Theorems and evidence from status characteristics theory research question this relationship between status and deviance in adolescence.² As outlined by Berger, Cohen, and Zelditch (1966), this theory contends that individuals with high status markers (e.g., male, popular) are expected to contribute more and perform better on any collective given task than low status individuals. In turn people interacting with individuals possessing high status markers act in ways to reinforce the expected status differential. If a person with high status

were to fail on a given collective task, they would stand to lose a great deal unless they could blame this failure on something other than a lack of personal competence.

Lucas and Lovaglia (2005) discovered that one way individuals with high status provide for this escape route is through “self-handicapping.” Originally developed by Berglas and Jones (1978), self-handicapping refers to a process by which individuals choose a behavior that they know will hinder their performance on a given task (e.g., not studying sufficiently for a test) (see Higgins and Harris (1988); Kolditz and Arkin (1982); and Sheperd and Arkin (1989) for empirical support). Lucas and Lovaglia (2005) argue that the “individuals most likely to self-handicap would be those who had been amply rewarded in life but who were also deeply uncertain about what they had been rewarded for. That is, self-handicappers do not perceive that their rewards have been contingent on the quality of their performance” (236).³ Most of the research in this field supports the prediction that individuals with high status (with the most to lose) are the most likely to choose alternatives that actually hamper success on given tasks (Arndt et al. 2002; Dietrich 1995; McCrea and Hirt 2001).

Therefore, participation in deviance and substance use may be popular students’ method of self-handicapping. If popular students’ lack of real basis for their high status is endangered (e.g., they fail a test or do not make an athletic team) they must have a way to redirect the attribution of any failing away from a dearth of personal ability. Popular students may accomplish this diversion by ensuring that other students know that they are not trying as hard as they possibly could. As noted earlier, De Bruyn and Cillessen (2005) found that popularity was related to lower levels of academic engagement (i.e., a visible sign of lack of effort) but not to actual academic performance. Students with high status may use this public

display of not trying to ensure a justifiable excuse in the case of failure, thereby protecting their assumed higher status. In a similar manner, I expect that popular students also may participate in deviant activities (especially substance use) as a form of self-handicapping. For example, a high status student could deflect devaluations of her intelligence over failing a test if people knew she had smoked marijuana the night before. Hence, there should not be a significant difference between high and low status youths' level of delinquency.⁴

There is some empirical evidence supporting this prediction as well. For example, Coleman (1961) noted that “stirring up some trouble” was significantly related to being a part of the leading crowd in some high schools. Using a small, local sample, Diego, Field, and Sanders (2003) found higher self-reports of popularity were positively related to the likelihood of alcohol and marijuana use. Similarly, in a longitudinal study of 185 adolescents, Allen and his colleagues (2005) showed that popular adolescents were more likely to experience problematic drinking than their less popular peers.

Expectations about Identity Status and Early Adult Success

Little attention has been paid to the long term influences of being in a high status identity, most likely because many people assume that it can only be helpful. There are reasons to believe that being in a high status crowd, however, may actually create problems in the transition to young adulthood. Specifically, I contend that high status adolescents abuse illicit substances at higher rates in young adulthood than low status adolescents (Hypothesis 3) and they also suffer higher levels of role instability (Hypothesis 4).

Status characteristics theory offers theorems and evidence to support this prediction. Coleman (1961) describes popularity in adolescence as a diffuse status characteristic (Webster and Driskell 1978). Other students expect popular students to be “better” at a range

of tasks, regardless of whether the reasons for their popularity are directly applicable to given activities (e.g., the best athletes are assumed to be the best “with the girls”). Low status students then act in a manner that reinforces and enhances this status differential, sometimes to the point that this deference masks shortcomings of the high status students. For example, Cohen (1993), in a review of the findings from small group experiments, explains that in mixed-ability, student groups, students with the higher perceived status had more influence in making final decisions concerning the completion of assigned tasks, regardless of their ability level. Similarly, popularity may provide adolescents undeserved control and power (i.e., it is not based on tangible, proven success) during high school.

Adolescent status, however, should only be a diffuse status characteristic within the confines of the adolescent social world (i.e., high school) because, as Coleman (1961) asserts, the adolescent world is distinct, with unique rules and obligations from those found in the adult world. Hence, adolescent status and its accompanying deference from others should not carry into other social worlds after high school, thereby presenting complications in young adulthood for adolescents who were in high status groups in high school. Specifically, losing the social acceptance of high status could prove especially detrimental. For example, Eccles and her colleagues (2003) found that adolescents who were self-proclaimed “jocks” (usually high status) in both 10th grade and 12th grade but no longer participated in athletics in the 12th grade were the most likely to experience increased depression. Adolescents who still thought they should be considered high status but who most likely were not socially identified as such (i.e., not given the rewards) suffered even more than those who self-identified as low status at both time points.

A similar process may occur for all high status adolescents in the transition to young adulthood. When popular adolescents leave high school they most likely enter social environments in which their former status no longer carries its assumed superiority. These young adults may have difficulty coping with the loss of this valued status and its accompanying benefits, which can lead to problematic behaviors, such as substance abuse (Hypothesis 3). During high school, popular adolescents learn patterns of social interaction within a context of receiving deference from others. In their academic or work environments after high school, high status adolescents should lose their previous status and its associated benefits, fundamentally changing the “rules of the game.” This loss of status coupled with being forced to relearn how to navigate their social environment successfully is the type of stressful life-event that has been shown to lead to heavy alcohol and drug use (Mirowsky and Ross 2003; Pearlin and Radabaugh 1976; Thoits 1995).

A similar process could lead to disruptions in high status adolescents’ academic and employment roles after high school (Hypothesis 4). Encountering the difficulties of these new social environments may lead some previously high status adolescents to exit the situation in an attempt to regain their status. For example, high status adolescents who leave home to go to college may drop out when they face struggles and return home in hopes that their former peers will afford them their superior status and its accompanying deference.

Additionally, these formerly popular adolescents may face real difficulties that force them to exit their first place of post high school work or education. Eckert (1989) shows that high status students are given preferential treatment by both peers and teachers in high school. For example, the popular crowd was allowed to turn assignments in late because teachers believed they were responsible for the Homecoming project. In college or a place of

employment, these students may expect similar benefits and leniency, and when they do not receive them they may fail out of school or be fired. Further, these difficulties should be exacerbated if their adolescent popularity concurrently occurred with low achievement (Hypothesis 4a). That is, adolescents who had high status but did not achieve at high levels academically suffer the amplified impact of losing their assumed status, having poor performance exposed, and not having any tangible skills on which to rely in their new social environments. High status adolescents who also achieved academically may not suffer the same level of post high school role disruption because even when their status is lost, they can still manage the basic requirements of their new place of work or education. But adolescents who got through high school, at least in part, due to the aforementioned benefits afforded to high status adolescents should be especially at risk to suffer role instability after high school.

METHODS

Data

The data for this study come from the National Study of Youth and Religion (NSYR), a nationally representative telephone survey of 3,290 U.S English and Spanish speaking teenagers, ages 13 to 17. The first wave of the NSYR was conducted from July 2002 to August 2003 using random-digit-dialing, drawing on a sample of randomly generated telephone numbers representative of all non cellular phone numbers in the United States. The overall response rate of 57% for the first survey is lower than desired, but it is similar to other current nationally-based surveys using similar methodologies. Further comparisons of the National Study of Youth and Religion data with 2002 U.S. Census data on households and with nationally representative surveys of adolescents—such as Monitoring the Future, the National Household Education Survey, and the National Longitudinal Study of

Adolescent Health—confirm that the NSYR provides a nationally representative sample of U.S. teenagers ages 13 to 17 and their parents without identifiable sampling or non response biases (for details, see Smith and Denton (2005)). Each teen and one parent completed a CATI survey that lasted approximately a half an hour for parents and an hour for teens.

In the fall of 2007 a follow up survey of the teens only was conducted. At the time of this survey the respondents were all between the ages of 18 and 24. In addition to replicating many of the items from the first survey, the follow-up survey contains several new measures that are more appropriate to assess young adult outcomes. For example, more detailed questions about the abuse, in addition to use, of alcohol are included, as is a standard measure of adult employment. Of the original 3,290 respondents, 2,532 were reinterviewed for a two-wave response rate of just over 77%.

There are several distinctive features of the National Study of Youth and Religion that make it particularly appealing for the present research. First, it is one of the only nationally representative, non-school based samples to follow adolescents into young adulthood. Second, at Time 1 all adolescents were asked to confirm that they were in a place in the house that prevented parents from overhearing their answers, thereby helping to reduce response bias, especially on particularly sensitive questions, such as perceived status, academic achievement, and deviance (Aquilino, Wright, and Supple 2000). Finally, the use of trained interviewers and direct telephone interviews allowed for the clarification of potentially ambiguous responses, increasing response validity. These stringent data collection standards yielded extremely sparse missing data as a result of refusals or “don’t know” responses. For a majority of the measures used in this study, these two categories combined rarely exceed one half of one percent of the distribution.

Measures

Status. Adolescent status is measured by a combination of two questions. At Time 1 students were asked to report on their self-perceived popularity with the question “How much would you say that you are part of the popular group at school?” to which they could respond a lot, some, a little, none.⁵ 35% of the sample reported being a part of the popular group a lot, 42% some, 14% a little, and 9% said they were not at all part of the popular group. To be sure, this measure suffers from perception bias (i.e., most students most likely think they are more popular than others may rate them). The bias, however, should operate in the same direction for all students, primarily upwards. Most likely this bias produces conservative results because some who are not “truly” popular are treated as such, thereby reducing the relationship between popularity and the outcomes.

Respondents also were asked “In the last year, how often, if at all, did other teenagers tease or make fun of you?” which had response options of never, a few times a year, about once a month, almost every week, and almost every day. This question directly reflects the level of deference that other students give the respondent, which is a key aspect of the presented hypotheses.

Qualitative coding is used to combine these two measures into a dichotomous indicator of high status. All students who said they were either “a little” or “not at all” part of the popular group are coded as low status. Next, respondents who claimed to be “some” part of the popular group *and* to not be teased at all are coded as part of the high status group. These respondents may not be in the elite status group but they are above average and receive a high level of deference. Finally, students who claimed to be a part of the popular group “a lot” and were teased no more than “a little” are coded as being a part of the high status

group.⁶ This coding leads to an almost even split of the sample, with 51% being coded as having high status.⁷ Distributions of all variables are presented in Table 4.1.

Adolescent Outcomes

Academic Achievement. The measure of academic success comes from a self reported GPA at Time 1. Respondents were asked “What kind of grades do you usually get in school?” with 9 possible response choices: mostly A’s, about half A’s and half B’s, mostly B’s, and so forth through mostly F’s. These reports were then coded on a numerical scale such that mostly A’s corresponds to 4.0, about half A’s and half B’s equals 3.5, and so on. There were 210 respondents who claimed “mixed” grades that were set to the sample mean. Thus, as shown in Table 4.1, the final measure ranges from 0 to 4 with 10 categories, has a mean of 3.18, and standard deviation of .71.

As with any self report measure there are questions about this item’s response validity, but when comparing reported GPA to actual GPA obtained from official records, research has found the correlation to be as high as .82 (Donovan and Jessor 1985; Dornbusch et al. 1987). The greatest discrepancy in the two reports most often comes from students who actually achieved lower than a C average inflating their self reports. Adolescents who are most likely to over-report their actual GPA are still at the lower end of the achievement continuum, which minimizes biasing the direction of any observed relationships.

Deviance. The level of adolescent deviance is measured by their reported use of illicit substances and suspensions from school at Time 1. Respondents were asked: “How often, if it at all, do you drink alcohol, such as beer, wine or mixed drinks?” Response options were never, a few times a year, about once a month, a few times a month, about once a week, and almost every day. For the overall sample, 38% reported some level of drinking. Respondents

also were asked “How often, if ever, have you used marijuana?” which had response choices of never, tried it once or twice, use it occasionally, and use it regularly. For the total sample 25% indicate some marijuana use, with 11% reporting more than experimentation. The percent of youth reporting either type of use is comparable to recent findings from the Monitoring the Future survey (Johnston, O’Malley, and Bachman 2002). Finally, students were asked “How many times in the last two years, if any, have you been suspended or expelled from school?” As presented in Table 4.1, over 80% of the sample report never being suspended. Therefore, I create a dichotomous indicator of ever having been suspended or expelled.

Young Adulthood Outcomes

Substance Abuse. Using a question simply about alcohol use may not be an accurate measure of problematic behavior for young adults. Thus, I use a combination of frequency of drinking and frequency of binge drinking to assess alcohol abuse in young adulthood. According to the Harvard Health Survey binge drinking is defined as consuming 5 or more drinks in one night for males and 4 or more drinks for females (Wechsler and Austin 1998). At Time 2 all respondents were asked “How often, if at all, do you drink alcohol, such as beer, wine or mixed drinks, not including at religious services?” Respondents who claimed to drink at all were asked “How many times, if at all, over the past two weeks have you drunk at least [4 / 5] drinks in the same night?”⁸ The response options to this question are five or more times, three or four times, once or twice, and never. 22% of the follow up sample reported never drinking alcohol, but 47% reported binge drinking at least once in the preceding two weeks. The resulting combination of the two measures ranges from 0 to 4, with 0 representing respondents who report no alcohol use, 1 representing respondents who drink

but do not binge drink, and the remaining categories corresponding to the level of binge drinking reported.

Although moderate alcohol use may not be seen as deviant among young adults, any level of marijuana use would indicate deviance. The question for marijuana use is replicated from the Time 1 survey and maintains the same response options. At the follow up survey, 30% of the respondents reported some marijuana use.

Employment / Education Attainment. I construct a categorical indicator to assess adolescents' role stability in the transition to young adulthood. Based on information provided in the Time 2 survey, I classify respondents into the following categories: 1) no post secondary education and not working, 2) some post secondary education but not currently enrolled or working, 3) started post secondary school but now working, 4) started post-secondary school and transferred to new school, 5) currently working, 6) currently working and in school, 7) currently in school 8) achieved post-secondary degree and currently working. Four questions are used to code respondents into one of these categories. Respondents were asked "Are you currently enrolled in school of any kind?" Respondents who reported not being enrolled were asked the highest grade they had completed, and if they claimed to have completed more than 12 years of education were asked follow up questions about the place of secondary education they attended. Respondents who reported being enrolled in a secondary school were asked if this was the first secondary school they had attended. Respondents also were asked "How many hours in a typical week are you currently working for pay?" Based on their answers to all four questions, respondents are placed into one of the 8 aforementioned categories. For example, all respondents who answer "no" to the

first question, report not completing more than 12 years of education, *and* no work hours are placed in the first category. The distribution of this variable is presented in Table 4.1.

From this complex categorization, I create two measures of role (in)stability. First for the total sample, I code all respondents who report being enrolled in their first place of post-secondary education (working or not), report working with no post-secondary education, or who report having completed a post-secondary degree and currently working (i.e., categories 5, 6, 7, and 8 from above) as having experienced a “stable” role transition. Next, I create a specific measure of having a disrupted academic trajectory because the data allow for a more nuanced assessment of respondents education history than employment history (i.e., the survey only asks about current employment). To do so, I limit the measure to only respondents reporting ever having gone to a place of post-secondary education. Respondents who report having dropped out of this first place, either completely or to transfer, are coded as having a “disrupted academic trajectory.” As presented in Table 4.1, 72% of the total sample is classified as having a stable overall trajectory, while 31% of respondents who report ever attending post-secondary education experience some disruption in their academic trajectory.

Predictors of Status and Outcomes

As discussed previously, to accurately assess the influence of status it is necessary to control for the behaviors that are simultaneously associated with being high status and the outcomes. The following measures were selected for their consistently found significant relationship with status, achievement, and deviance (for reviews see: Milner 2004 (status); Windle 1999; Windle and Windle 2003 (substance use); Lipsey and Derzon 1998 (deviance); Steinberg, Dornbusch, and Brown 1996 [achievement]).

Extracurricular Activities. Two measures of involvement in extracurricular activities are included. All respondents were asked “Please tell me, are there any regular, organized activities you do after school or in the evenings?”⁹ This question was open ended, allowing the respondent to initially name up to six activities. After their first set of responses, individuals were prompted twice more to check if they were involved in any other activities, allowing for a total of 18 possible activities to be named. The first indicator of extracurricular activity is a sum of the number of activities named. This variable ranges in observed values from 0 to 13, has a mean of 2.18, and a standard deviation of 2.01. On average the respondents participated in 2 organized out-of-school activities.

In addition to this count measure, a categorical indicator of participation is included. All of the verbatim responses were coded into 39 distinct categories, ranging from softball to school paper. Following Lamborn and colleagues’ (1992) classification, the activities are categorized as glory sports (basketball, baseball, cheerleading, football), other sports (e.g., soccer, swimming, wrestling), leadership activities (student government), clubs and interest groups (e.g., art club, math club, debate team), and performing activities (e.g., school play, choir, band). From this categorization a series of dummy variables are created to indicate whether the individual participated in each of the various types of activities.

Number of Friends. All respondents were asked “Okay, I would like you to think of your closest friends, up to five of them. They may be from your school, neighborhood, family, a religious congregation, work, wherever, but should not include your parents. They can also include a boyfriend or girlfriend.” The measure of number of friends is the simple count of friends named, which has a maximum of 5, a mean of 4.76, and a standard deviation of .73.

Dating. Respondents were asked “How many total different people, if any, have you dated since you turned 13 years old?” which was a verbatim response. This variable is entered as a continuous measure of number of people dated. On average, respondents report having dated around 4 people, but the measures’ standard deviation of over 7 indicates the large range of responses.

Physically Intimate Experience. In addition to “dating” respondents were asked “How many total different people, if any, have you been physically involved with, more than just holding hands and light kissing, since you turned 13 years old?” Respondents who reported being physically involved with at least one person were then asked “Have you ever willingly touched another person’s private areas or willingly been touched by another person in your private areas under your clothes, or not?” I construct a dichotomous measure indicating whether the respondent reports in the affirmative to this question. All respondents claiming that they have not touched or been touched intimately or have not been physically involved with anyone since turning 13 are the reference group. 34% of the sample reports having had a physically intimate experience.

Importance of Being “Cool.” As an indicator of the individuals’ desire to be in the popular group, I include a measure created from a question that asked “How important or unimportant is it to you to fit in with what teens your age think is cool?” which had response options of extremely important, very, somewhat, not very, not important at all. The variable ranges from 1 to 5 with higher scores indicating greater importance. It has a mean of 3.40 and a standard deviation of 1.10, which shows that most respondents think it is at least somewhat important to do what they believe their peers think is cool.

Frequency of Teasing Others. Previous research has indicated that part of gaining status in adolescence comes from putting other students down (Eder 1989). Therefore, I include a measure of self reported teasing of others. Respondents were asked at Time 1, “In the last year, how often, if at all, did you tease or make fun of other teenagers?” which had response options ranging from never to almost every day. On average, respondents report teasing other teens a few times in the past year ($\mu = 2.18$, $SD = 1.17$).

Positive Self Image. Four items are used to create a measure of respondents’ self image. The first question asked “In general, how happy or unhappy are you with your body and physical appearance?” and had five response options ranging from very happy to very unhappy. The next three items came from a similar root question that asked “In general how much do you: feel loved and accepted for who you are; feel alone and misunderstood; feel invisible because people don’t pay attention to you?” All three items had four response options ranging from none to a lot. The alpha for the four item construct is .57. The resulting measure ranges from 0 to 5 and has a mean of 3.5 ($SD = .62$), indicating that most teens have a relatively positive self image.

Parent Income. All parent respondents at Time 1 were asked “Can you tell me, what is your total household income before taxes?” They were then provided a set of 11 response options in 10,000 dollar ranges, starting with below 10,000 dollars and ending with more than 100,000. These categorical responses were then set at their midpoint, with the minimum being 5,000, the maximum 105,000 dollars, and a median of 55,000 dollars. The weighted mean of income is 58,083 dollars, with a standard deviation of 32,274 dollars. 130 respondents refused to answer and another 66 reported not knowing their income, for a total of 196 missing cases on income. In order to retain as much information as possible, all of the

missing cases' income was imputed to the sample mean and a dummy variable indicating the missing cases was included in all analysis. Finally, this semi continuous measure is divided by 10,000 to ease interpretation of the coefficients.

Parent Education. Education is measured through a series of two questions from the parent survey about the parent respondent's education and, if applicable, a residential partner's education. First, parent respondents were asked "How much schooling have you had? Is it less than 12th grade, a high school degree, or education beyond high school?" Respondents who indicated they had completed education beyond high school were then asked "How much schooling beyond high school have you had, or what is the highest degree you have earned?" This question had 10 response choices ranging from GED or high school equivalent to professional degree beyond BA/BS. I combine these two questions into a single variable with five categories: Less than High School, High School Degree, Associates or Technical Degree, BA or BS Degree, and Higher Degree. A similar set of questions and coding is employed for the respondent's spouse or cohabiting partner.

I then create a measure to indicate the highest parent degree present in the household, meaning that the value is taken from whichever parent had earned the higher degree for two parent families, while the education of the present parent is used in single parent homes. 6% of households have less than a high school degree, 33% have a high school degree, 17% have obtained an Associates or technical degree, 24% have a BA or BS, and 20% have something higher. For the final analysis, the highest education in the household variable is used as a series of dummies with High School degree as the reference category.

Family Structure. Based on the parent respondent's reported living situation, an indicator of the teen's family structure is constructed. Two parent homes, which include

step, cohabiting, and adoptive families, serve as the indicator category and make up 75% of the total sample. Single parent families, 25% of the total sample, are the reference category. Of the single parents in the sample 85% are single mothers and 15% are single fathers, 22% and 4% of the overall sample respectively.

Teen Characteristics. The first teen characteristic included is self-reported gender (females=1 (49% of sample); males=0 [51% of sample]). The teens also were asked their race or ethnic group without supplied categories, unless a prompt was necessary, which did include an option for mixed. Responses were collapsed into four categories: white (67%), black (16%), Hispanic (12%), and Other (6%). The categorical variable is entered as a set of dummies, with white being the reference category. Age was based on self-reported birth date and date of the first survey completion. The mean of this original age variable is 15.5 years old ($SD=1.41$).

Predictors of Outcomes Only

In addition to the measures that are used to predict both being in the high status group and the outcomes, a series of predictors are used only to predict the outcomes. These measures were chosen due to their consistently found influence on deviance and achievement.

Number of Substance Using Friends. As noted above, respondents were asked to nominate their five closest friends. They then were asked a series of questions about each of these friends. The measure of substance using friends is the total number of friends the respondents said “does drugs or drinks a lot of alcohol.” The resulting measure ranges from 0 to 5 and has a mean of .68 ($SD = 1.29$), showing that most respondents report not having any friends who use substances.

Number of Religious Friends. Similarly, I use a measure of number of religious friends that comes from the question asking if each of the respondent's nominated friends is "religious." The continuous measure again ranges from 0 to 5 and has a mean of 3.88 ($SD = 1.64$), indicating that a majority of respondents have several religious friends.

Parent-Friend Network Closure. The measure of adult network closure comes from a combination of 3 questions, asking if each friend's parents knew the respondent, knew the respondent's parents, and if the respondent's parents knew the friend. The closure measure is the average number, out of five, of the respondent's friends who satisfy each criterion, producing a mean of 3.38 ($SD = 1.19$).

Family Cohesion. Family cohesion is an index created from 16 items, from both the parent and child survey, tapping the overall level of closeness in the family (e.g., how often, from never to very often, each parent says "I love you," hugs the child, and how close child feels to parent). The 16 items are from 8 questions asked about each parent individually, thus the scale for respondents in single parent families consisted of 8 items (based on the present parent). The scales for single parent and two parent families were then combined, similar to Stattin and Kerr (2000). The Cronbach's α for the scale is .86. The resulting measure has a mean of 2.24 ($SD = .60$) on a range of 0 to 3, showing a relatively high level of closeness between teens and parents.

Parent Monitoring. Five questions contribute to the overall index of parent monitoring. The first three items come from the teen's survey addressing the teens' perceptions of their parent's monitoring. The first two are part of the same question: "How much (do/does) your [parent type] monitor? (a) your music, television, and movie watching and (b) who you hang out with," and "In general, how often (do/does) your [parent type]

know what you are actually doing when you're not at home?" The possible responses for each question are never, rarely, sometimes, often, always. To assess the direct monitoring activities of parents, two questions from the parent survey were included: "How much do you monitor [your teen]'s television and movie watching?" and "How much do you monitor [your teen]'s Internet use?" each of which had similar response options to the teen questions. This measure, therefore, assesses both actual controlling behavior and perceived level of monitoring, an approach advocated by Dishion and McMahon (1998) and Stattin and Kerr (2000) to fully capture the extent of parent monitoring. The resulting scale has an α of .64, a range from 0 to 4, and a mean of 2.62 ($SD = .75$).

Non-Parental Adult Support. Non parental adult support is a single item measure of how many non-parental adults the respondent claims he/she could "turn to for support or advice." Responses were coded to range from 0 to 15 or more, resulting in a mean of 5.07 ($SD = 3.89$).

Analytic Strategy

This project seeks to understand the contemporaneous and long-term impact of holding a high status identity in adolescence. Yet, as noted, such an analysis is complicated by the potential endogeneity of status when it is used to predict academic achievement, substance use, and role stability. Any significant relationship between high status and these outcomes could stem from similar factors leading to status and the outcome. To accomplish the goals of this project and analytically alleviate the bias caused by this endogeneity, I use a propensity score matching analysis. Propensity score matching is a counterfactual technique that helps identify the influence of one variable (i.e., a "treatment"). Conceptually, propensity score matching approximates an experiment design by estimating what a treated respondent

would have scored on the outcome had he/she not undergone the treatment or vice versa (e.g., Harding 2006, treatment is living in a poor neighborhood; Morgan 2001, treatment is attending a Catholic school).

Some scholars argue that this procedure is similar to a multivariate regression model that controls for all pertinent variables. But if adolescents who are popular differ significantly in terms of the other covariates in the model from adolescents who are not popular, “regression essentially projects the behavior of individuals in one group outside the observed range to form a comparison for the other at common values of the covariate. Such projections can be highly sensitive to functional form” (Foster 2003: 1185). In other words, the parameter for status (i.e., the comparison of the high to low status group) would be estimated with all other variables at their mean, but making such a comparison for the two status groups may be nonsensical if their distributions on the other variables are significantly different.

Propensity score matching first identifies cases that share similar scores for the independent variables that are strongly associated with the treatment but who are different on the treatment itself. When using more than a few independent variables it is impossible to find cases that are exact matches. But it is possible to estimate the likelihood, or propensity, that a given respondent experiences the treatment. Respondents then are matched based on the similarity of their propensity scores. Finally, the outcomes are modeled using this matched sample, with cases that are unable to be matched (i.e., too extreme in the propensity to either be in or out of the treatment) excluded.

To implement this procedure, a probit regression model is used to predict being popular, which determines individuals’ propensity score for being in the treatment. To

predict membership in this group, the model includes extracurricular participation, importance of doing what is “cool,” number of friends, number of people dated, ever having a physically romantic relationship, frequency of teasing others, positive self image, and all of the demographic characteristics as predictors in the probit regression. Using the results from this model, cases are matched based on their propensity score using common support matching. Support here refers to the bounds within which case’s propensity score must fall in order to be matched. If a high status individual cannot be matched with a low status partner because his/her propensity score is outside of these bounds, he/she is dropped from the sample (Morgan and Harding 2006). For the given analysis, the caliper is set at .001, which defines the bound on how dissimilar a case’s propensity score can be before being excluded from the sample.

Next, an inverse probability of treatment weight is calculated based on individual’s propensity score. For the treated cases, the weight is calculated as $\{1/\text{propensity score}\}$, while the untreated cases’ is calculated as $\{1/1 - \text{propensity score}\}$. This procedure gives more weight to untreated cases that are more like the treated cases (i.e., high propensity scores) and to treated cases that are more like untreated cases (i.e., low propensity scores), which further balances the distribution of the endogenous variables across treated and untreated cases (Morgan and Harding 2006). This weight is then applied to a series of regression models predicting each outcome. These models include terms for the treatment, the predictors of being in the treatment, and predictors of the outcome. The measures that only are entered as predictors of the outcomes in this analysis include the number of friends who use substances, number of religious friends, family cohesion, parent monitoring, adult network closure, and non-parental adult support. Running the final models in this way

achieves what Bang and Robins (2007) call “doubly robust regression,” in that there are two opportunities (the propensity model and outcome model) to correctly specify the functional form of the model. And as long as one of these models is correct, then the estimate of the impact of being in the treatment is unbiased.

In many ways the final models utilizing propensity score matching are similar in form to basic regressions, but they have a more complete adjustment for the confounding relationship between the predictors, being popular, and the outcomes. A regression model for each of the contemporaneous (Hypothesis 1 and 2) and young adulthood outcomes (Hypothesis 3 and 4) is estimated, which include only treatment cases that have propensity scores within the region of common support and are weighted using the propensity scores derived from the probit regression models estimating being in high status. Further, an interaction term between status and adolescent academic achievement is included in the young adult outcome models to address Hypotheses 4a. Even though the models are similar in structure, the estimates from the propensity score matching procedure further explicate the influence of status on the given outcomes, *net* of all of the behaviors leading to being high status.

RESULTS

As noted, propensity score matching is a technique that helps disentangle endogenous relationships between predictors, a “treatment,” and the outcome. It is designed to help prevent falsely attributing causal claims to the “treatment” when other factors lead both to the likelihood of being in the treatment and the outcome. The final two columns of Table 4.1 provide evidence of this potential problem in the current investigation. Adolescents in the high status group (i.e., the treatment) use substances and get suspended more frequently than

do their peers with less status. In young adulthood, the formerly popular adolescents abuse alcohol more frequently and are more likely to drop out of their first post-secondary school than are their less popular counterparts. Yet, the two groups also are significantly different on several factors that may be associated with why adolescents are in the high (versus low) status group, as well as these outcomes. For example, adolescents who participate in “glory sports” (i.e., basketball, baseball, cheerleading, and football) are in the high status group at higher rates than adolescents who do not play such sports. Participating in these types of sports has been shown to be related to higher levels of substance use (Miller et al. 2007). Therefore, popular adolescents’ high levels of alcohol use actually may stem from their participation in these glory sports, rather than being in the high status group. Propensity score matching helps to more accurately assess the independent influence of being in the high status group.

The first step in the propensity score matching technique is to predict the likelihood of being in the treatment group (high status). The results from the probit regression predicting who is in the high status group at Time 1 are presented in Table 4.2. The majority of the relationships support previous studies’ findings of the factors that lead to popularity in high school, providing confidence in the constructed measure. For example, being in a “glory sport” (i.e., baseball, basketball, cheerleading, or football) significantly increases the likelihood that an adolescent is in the high status group in high school. Similarly, participating in leadership activities, dating, having had physically romantic relationships, more friends, and a more positive self image all significantly increase the chance that an adolescent is in the high status group. African American, Hispanic, and female adolescents also are more likely to be in the high status group.

In addition to these results that replicate previous research, there are several noteworthy findings. The more important an adolescent believes it is to be cool, the less likely she is to be in the high status group ($b = -.114, p < .001$). Consciously basing one's actions on what other adolescents believe is cool inversely relates to one actually being rewarded with a higher status. More frequent teasing of others also is negatively related to the likelihood of being in the high status group ($b = -.215, p < .001$). Status in high schools often is portrayed as a zero-sum game, to get to the top one must push others down along the way. But the present analysis contradicts that conclusion, as adolescents who verbally bully others more frequently are less likely to be the most popular adolescents.

High Status and Adolescent Outcomes

To be clear, this study does not attempt to provide a comprehensive model of popularity in high school. Using the estimates from this high status model in the propensity score method, however, helps isolate the independent influence of being in the high status group. The results from the Time 1 regressions, utilizing the propensity score matching and weights, are displayed in Table 4.3. The OLS regression results from Model 1 show that being in the high status group does not significantly increase adolescents' GPA, supporting Hypothesis 1. The most popular adolescents do not achieve academically at any significantly different level than do their less popular peers. Other adolescent factors, such as participating in more extracurricular activities, having a positive self image, and maintaining close relationships with parents, are associated with significantly higher grades. But having adjusted for adolescents' propensity for being in the high status group, there is no independent relationship between popularity and academic achievement in high school.

Still, a curvilinear relationship between status and GPA could exist. High status adolescents may achieve moderately well but not to the highest level due to possible stigmas (i.e., being labeled as a “nerd” or “dork”). To test this possibility Model 1 was re-estimated using a multi-logistic regression (results not shown), which allows for a comparison between very low achievement, moderate achievement, and very high achievement. The results revealed no significant relationship between status group and any level of academic achievement. Therefore the results support Hypothesis 1, demonstrating a null relationship between status and academic achievement in high school.

Models 2 and 3 indicate that being in the high status group is significantly related to adolescents’ frequency of both alcohol and marijuana use, in contradiction to Hypothesis 2. Yet, it is not the lower status teens who use substances at high levels, as previous research would suggest, but rather the most popular teens are the most likely to be using alcohol ($b = .352, p < .001$) and marijuana ($b = .290, p < .05$ for marijuana use) at high levels. Even after adjusting for factors that may lead to both high status and substance use, there is a direct relationship between being popular and higher levels of substance use. Other predictors, such as deviant friends and parent monitoring, also are significantly related to adolescents’ level of substance use but, contrary to Hypothesis 2, the most popular adolescents are the most likely to be drinking alcohol and smoking marijuana frequently.

Similarly, high status is related significantly to being suspended from school ($b = .271, p < .05$ for marijuana use). Popular adolescents are 31% ($e^{.271}$) more likely to have been suspended or expelled from school. Not only are high status adolescents more likely than low status adolescents to participate in potentially covert deviant behavior (i.e., substance use), they also are more likely to engage in behaviors that result in harsh sanctions.

Collectively the results are inconsistent with Hypothesis 2, which predicted there would not be a significant difference between high and low status adolescents in terms of deviant behavior. High status adolescents are using substances at significantly higher levels than low status adolescents and are more likely to be suspended from school. Furthermore, there is no significant difference between the groups level of academic achievement. Together these findings call into question the stereotypical image of high status adolescents, as well as the conclusions of previous research, that portray popular adolescents as “model” students. The results also support further examining the potential long term negative consequences of adolescent high status identities (Hypotheses 3 and 4).

High Status and Young Adult Outcomes

Table 4.4 presents the results for the models predicting the Time 2, young adult deviance outcomes. The measures used in these models are similar to the ones from Table 4.3, except the Time 2 models include controls for adolescent substance use and GPA. Model 1 shows support for Hypothesis 3. High status adolescents are more likely to binge drink more frequently in young adulthood than are low status adolescents ($b = .222, p < .05$). This significant impact does not apply to marijuana use. High status adolescents do not use marijuana more frequently than low status adolescents when they become young adults. Thus, there is partial support for Hypothesis 3, as status in adolescence is related to heavy alcohol abuse in young adulthood but not frequent marijuana use.

To demonstrate the magnitude of the relationship between adolescent popularity and young adult alcohol abuse, Figure 4.1 displays the predicted probability of young adults reporting binge drinking one to two times or more in the prior two weeks. As can be seen, adolescents in the high status group have a 50% chance of binge drinking frequently in

young adulthood, compared to adolescents not in the high status group who have less than a 45% chance. This influence is similar in magnitude to the other significant predictors of young adult binge drinking. Males and adolescents who had a physically intimate relationship both have a slightly greater than 50% likelihood of heavy binge drinking in young adulthood. Although adolescent status is unrelated to marijuana use, it is one of the most consequential risk factors leading to high levels of alcohol abuse 4 years later in young adulthood.

High status during adolescence shows a similar detrimental impact on role instability in young adulthood. Model 1 in Table 4.5 indicates that high status adolescents are significantly less likely to have a stable education or employment trajectory after high school ($b = -.251, p < .05$). The most popular adolescents are more likely to be unemployed or to change or drop out of their first post-secondary education institution than are less popular adolescents, supporting Hypothesis 4. This finding is especially noteworthy when examining the rest of the predictors in this model. There are only three other adolescent predictors (age, being of another race, and having more friends) that are significant in this final model including high status. Again, not only is there a significant difference between the high and low status adolescents in their young adult outcomes, but being popular in adolescence is one of the primary risk factors leading to young adult role instability.

Model 2 further examines role instability by focusing on academic trajectories. The model estimates the final analysis on the sub-sample of young adults who have attended some form of post-secondary education, with respondents who report having dropped out (either completely or to attend another school) being coded as 1.¹⁰ The results are consistent with the previous analysis of the total sample. High status adolescents are more likely to

experience disruption in their post high school academic trajectory than are lower status adolescents ($b = .269, p < .05$). In fact, adolescents in the high status group are 31% ($e^{.269}$) more likely to have dropped out of their first place of post high school education than are adolescents not in this most popular group. Being in the most popular group in adolescence leads to significant negative consequences in young adulthood, both for alcohol abuse and academic role stability.

The final hypothesis (4a) predicted that the negative impact of being in the high status group during adolescence on young adult role stability would be most severe for adolescents who struggled academically in high school. To test this prediction, Model 1 and 2 from Table 4.5 were re-estimated with an interaction term between status and GPA. Because both models revealed a significant interactive influence between adolescent status and GPA on post high school role stability, only the results predicting academic disruption are shown in Model 3 of Table 4.5. Figure 4.2 is a predicted probability plot, based on Model 5, showing the conditional influence of status, by GPA, on maintaining a stable post high school academic trajectory.¹¹ This graph shows that low status adolescents have around the average 27% chance of dropping out of their first place of post high school education, regardless of their high school GPA. Follow up analysis indicated that the line for low status adolescents was not significantly different from zero, meaning that GPA does not significantly increase or decrease low status adolescents' likelihood of academic instability.

But, as predicted by Hypothesis 4a, the analysis indicates an increased negative influence of having a low GPA for high status adolescents. As GPA decreases, the likelihood of high status adolescents dropping out of post secondary education significantly increases. The predicted probability of dropping out of post secondary education for the high and low

status groups become more similar, and even intersect, as GPA increases. Further analysis showed, however, that high status adolescents never have a significantly lower likelihood of dropping out of post secondary education than low status adolescents. When adolescents have above a 3.0 GPA there is *not* a significant difference between status groups' likelihood of dropping out. That is, only the most highly achieving popular students are protected from the direct negative impact that high status has on post high school academic instability. Therefore, being in the high status group in high school is related to greater academic instability in young adulthood and this negative impact is greatest for high status adolescents who do not achieve at high levels academically.

CONCLUSIONS

The objective of this study has been to explore both the short and long term impact of holding high status identities in high school. Drawing on status characteristics theory, I proposed that high status adolescents would not receive higher grades than lower status adolescents and that there would be no difference between the groups in terms of substance use. Further, I contended that high status adolescents would be more likely than low status adolescents to abuse substances and experience role instability after high school, and the latter differences would be even greater for high status adolescents who received poor grades during high school. Using propensity score matching to control for the potential confounding relationship between factors leading to high status and the outcomes of interest, I find support for the majority of these hypotheses. The most popular students in high school do not receive significantly higher grades than their less popular peers but, contrary to expectations, do use substances in adolescence and young adulthood at higher rates. And high status

adolescents actually are more likely to experience a role disruption in the transition to young adulthood than low status adolescents.

As predicted by Hypothesis 1, popularity in adolescence is not related to greater academic achievement during high school. Although high status adolescents often are portrayed as the “model students,” this study reveals that they do not perform any better in the classroom than low status students. This null relationship does not stem from extremely high achievement being stigmatized (i.e., nerds), as tests revealed high and low status adolescents are equally likely to be in any category of GPA. This finding supports the use of status characteristics theory to explain the impact of popularity in high school. That is, high status adolescents generally are assumed to be better at a range of tasks but empirical examination shows that in fact they are not more successful on objective measures.

Given this lack of observable superiority, one may wonder how popular adolescents maintain their status. Counter to Hypothesis 2, which predicted a null relationship between status and deviance, the results indicate that adolescents in the high status group use alcohol and marijuana more frequently than adolescents with lower status. This finding may be explained by high status adolescents self-handicapping through higher levels of substance use. Such deviant behavior might be assumed to reduce one’s status, but when utilized as a defense mechanism against claims of intellectual deficits, substance use actually becomes a modus for protecting high status. Additionally, this substance use can be used to help maintain status by enhancing others’ perception of one’s achievements. Adolescents who achieve at even moderate academic levels while drinking or smoking marijuana may be perceived as being even more intelligent than adolescents who take the more traditional route

to academic achievement. Therefore, substance use becomes a tool of high status adolescents to ensure their continued place in their valued social location.

Interestingly, high status is related significantly to being suspended from school. While substance abuse, if hidden from authority figures, can serve as a mechanism for protecting an academic failing or augmenting moderate achievement, one might think that committing deviant acts to the point of sanction would threaten the presentation upon which high status adolescents maintain others' expectations. Self-handicapping behaviors that receive observable punishment would seem to defeat the purpose of the behavior, as it would most likely reveal the weakness that was being protected (e.g., skipping classes to avoid turning in assignments). Understanding the mechanism that leads high status students to commit deviant behaviors that lead to severe punishment is a crucial question for future research.

Collectively these findings question previous studies' conclusions about low status adolescents. Much of this research claims that being in the low status group leads adolescents to disengage from traditional institutions (i.e., school and parents), which in turn can lead to extreme negative behavior. I find that low status adolescents are not breaking away from the school academically or behaviorally. These findings do not negate other possible harmful consequences related to being low status in high school (e.g., emotional trauma) or the possibility that low status adolescents could be committing deviant behaviors other than substance use or ones that are sanctioned by the school (e.g., theft). But these results do suggest that future research should continue to investigate the relationship between status, both low *and* high, and a full range of adolescent behaviors and outcomes.

Not only does high status have a contemporaneous influence on adolescent substance use, but it also is associated with higher levels of alcohol abuse in young adulthood, as predicted by Hypothesis 3. Adolescents who were in the high status group in high school binge drink more frequently in young adulthood than their low status counterparts. This problematic drinking behavior may stem from the stress high status adolescents encounter when they enter new social environments. In high school popular students received benefits based on their status and structured their understanding of their social worlds on the deference they received from others. Exiting this world, however, places them in environments in which their popularity no longer carries influence. Losing this valued identity marker and its accompanying advantages can be a stressful life event that leads to negative behaviors, such as heavy alcohol abuse.

Or the increased rates of alcohol abuse could be a continuation of the self-handicapping behaviors high status adolescents used in high school. In the transition to young adulthood, high status adolescents could begin to recognize the declining importance of their former status. In turn they may increase their handicapping behaviors, including heavy alcohol use, in an attempt to maintain their status superiority. Eventually, this once moderate deviant behavior could get out of control, leading to frequent binge drinking in young adulthood.

Perhaps even more troubling is the finding of support for Hypothesis 4, which predicted high status adolescents would be at risk for role instability in young adulthood. Both in employment and academics, the most popular adolescents are more likely to experience disruption in young adulthood than are less popular adolescents. Again, this relationship most likely stems from the loss of status and its accompanying deference. In

their post high school environments, previously high status adolescents may be “lost at sea” and unable to handle the challenges of their first place of employment or education. This interpretation is bolstered by the analysis focused on academic trajectories, which shows a significant positive relationship between high status in high school and dropping out of the first place of post-secondary education. Popular students who were given deference from peers and teachers during high school may struggle in the classroom when they do not receive such assistance. The emotional stress that comes from the challenge of meeting the demands of post secondary school without the benefits of their high status may lead them to exit the situation. Additionally, not receiving this preferential treatment may lead to tangible academic difficulties that force popular adolescents to drop out.

The latter of these possible pathways is supported by the significant, interactive influence of high school GPA and status on dropping out of post high school education. Across both groups, high status students are more likely to drop out of their first place of post secondary education than are low status students. Yet, high status adolescents who succeeded academically in high school have a similarly low likelihood of dropping out as do low status students who achieved at a high level. Most likely, when these high status, high achieving students enter a new education environment and lose their status, they are able to rely on their academic skills and training to find their way. But, as Hypothesis 4a expected, high status students with average or below high school academic records do not have such an anchor to turn to, and are therefore the most likely to drop out of their first place of post high school education. Future research should investigate the mechanisms leading to such instability for high status adolescents. Using qualitative methods would help illuminate how

students cognitively and emotionally handle the transition to new environments and the loss of status.

There are limitations to this study that should be noted. The findings all pertain to perceived as opposed to sociometric (likeability) status. Given the theoretical frame and objectives of this study, perceived popularity was the most appropriate indicator of status. But other research has shown that sociometric popularity is important as well. An ideal measure of status would include both sociometric and perceived popularity. Specifically, an inconsistency between these measures (i.e., believing one is very popular but actually not well-liked or not recognized as such) could be an especially dangerous risk factor for adolescents as they transition out of high school. This status inconsistency may increase problems coping with the new environments after high school. Understanding how these two types of status may operate in concert or opposition is an important topic for future research. Similarly, I distinguish high from low status in a somewhat simplified way. High school status is a more complicated and diverse phenomenon than I am able to fully capture. While I believe the current study is vital to establish fundamental relationships, analyses of different types of status and popularity may reveal different findings.

Further, the direction of influence between status and the adolescent outcomes is difficult to fully identify given the cross sectional nature of the data for that analysis. Assuredly both academic achievement and deviance could influence the likelihood of adolescents being in the high status group. But the results from the longitudinal analysis provide support for the hypothesized direction of influence. Even when controlling for previous levels of substance use, being in the high status group was associated with higher levels of future alcohol use. Its advantages notwithstanding, propensity score matching is not

a panacea for all potential bias stemming from endogeneity. Other factors that were not included in the calculation of the propensity score could be driving, at least partially, the relationship between status and the outcomes. But using this technique has been shown to be more advantageous than a simple regression model that does not adjust for the different likelihood of being in a “treatment” of interest (see Morgan and Harding 2006). Finally, this study is limited to capturing only “early” young adulthood, a time at which adolescent status is most likely to be influential. It is possible that the problematic behavior and instability high status adolescents experience during young adulthood may disappear later in life, especially after they adjust to their new social environments. Alternatively, heavy alcohol use and role instability in young adulthood could create a process of cumulative disadvantage that continues to hinder high status adolescents’ life trajectories into adulthood. Continued longitudinal research, following adolescents into later adulthood will help elucidate this long term relationship.

Despite these limitations, this study, using nationally representative data and novel methods, has provided valuable insight into the consequences of high school status. By moving beyond traditional assumptions and portrayals of adolescent popularity, we see that high school status hierarchies pose serious risks for students at the top of the social status ranking. The most popular adolescents’ increased vulnerability to engage in frequent substance use during adolescence and problem drinking behaviors in young adulthood could have long term health and social consequences. And perhaps most importantly, the danger of these high status adolescents suffering through unstable role transitions, in both academics and employment, could be crucial for long term education and occupational attainment.

Continuing to examine the mechanisms driving these negative relationships will be vital to understanding how adolescents manage the transition into adulthood.

ENDNOTES

1. There is a surprising dearth of studies that empirically test the independent influence of status. Thus, an additional contribution of this project is to more adequately assess whether status does have the hypothesized, emergent impact on important adolescent and adult outcomes.
2. To be clear, this study does not test status characteristics theory because the given predictions extend beyond its scope conditions (i.e., not all of the actors are working explicitly towards the accomplishment of a common task). Rather, this study borrows from status characteristics theory and its accompanying research to guide and inform the presented hypotheses.
3. This theory does not rest on the explicit presumption that high status individuals are consciously aware of the undeserved nature of their status (although many likely are). Rather, high status individuals simply recognize the tenuous nature of their position and therefore act in ways to protect the valued benefits that come from maintaining their status.
4. It should also be noted that if this prediction is true, it will be a strong contribution to the status characteristics and self-handicapping literature. Research in both of these fields has primarily been undertaken using lab based experiments, so a more macro, survey-based confirmation of their predictions would support and enhance the generalizability of their claims.
5. At Time 1 there were 117 students who reported being home schooled. They were therefore asked a similar question about popularity, but “at school” was replaced with “among peers.”
6. I allow for the most popular students to claim being teased a little because of the observed “teasing rituals” among high status males (Eder 1995). Placing respondents who report being teased at all in the low status group potentially would misclassify a portion of these high status males who experience this less harmful teasing.
7. Some may question whether truly half of all adolescents are “popular.” The current hypothesis are made in terms of students having higher status and receiving its accompanying deference, not based on the student being a part of the most elite clique. Therefore, an even split of students with higher status is not unreasonable. See Appendix B for sensitivity tests with other designations of high status.
8. If respondents asked what was meant by “a drink,” the following definition, based on the Harvard Health Survey, was provided: “One drink is a 12-ounce bottle or can of beer; a 4-ounce glass of wine; and 12-ounce bottle or can of wine cooler; or a 1.25-ounce shot of liquor, either straight or in a mixed drink.”

9. For those respondents who were no longer in school “after school” was altered to read “during the day,” and everyone was instructed to not include paid employment as an organized activity.
10. Being in the high status group in adolescence did not significantly influence who attended some form of post-secondary education (results not shown). Therefore, the estimates of the influence of status on dropping out of post-secondary school do not stem from a different likelihood, by status, of attending such a school.
11. Even though GPA ranges from 0 to 4.0, the predicted probabilities are shown only when GPA is 2.0 or greater because a very small percent (less than 2%) of respondents who report ever going to post-secondary education have a high school GPA of lower than 2.0.

Table 4.1. Descriptive Statistics for all Measures – National Study of Youth and Religion
[Weighted]

	Mean (<i>SD</i> ^a)	Status	
		Low	High
<i>Adolescent Outcomes</i>			
Frequency of Alcohol Use	1.75 (1.23)	1.65	1.86****
Frequency of Marijuana Use	1.36 (.74)	1.33	1.44****
Have Been Suspended from School	.19	.17	.23****
GPA	3.18 (.71)	3.15	3.17
<i>Young Adult Outcomes</i> ^b			
Frequency of Heavy Alcohol Use (Binge Drinking)	1.51 (1.16)	1.42	1.63****
Frequency of Marijuana Use	1.92 (1.79)	1.91	1.98
<i>Transition to Young Adulthood</i>			
Still in HS	.07	.07	.07
No Secondary Ed & No Work	.06	.05	.06
Some Secondary Ed; Not Enrolled No Work	.02	.02	.02
Some Secondary Ed; Not Enrolled Working	.08	.07	.08
Dropped Out of First Secondary School	.12	.11	.14*
Working Only	.18	.18	.18
Working and In School	.28	.29	.26
School Only	.16	.17	.15
BA/AA Degree Earned and Working	.04	.03	.04
Stable Post-Secondary Trajectory	.72	.74	.70*
Disrupted Post-Secondary School ^c	.31	.29	.35*
High Status	.51		

Continued on Next Page

Table 4.1. Continued

	Mean (<i>SD</i> ^a)	Status	
		Low	High
<i>Time 1 Predictor Variables in All Models</i>			
Age	15.49 (1.41)	15.46	15.52
<i>Race</i>			
White (Reference)	.67	.72	.60***
Black	.16	.13	.22***
Hispanic	.12	.10	.13*
Other	.06	.05	.05
Female	.49	.48	.51
Two Parent Household	.75	.74	.70*
Parent Income (<i>Thousands</i>)	58.73 (31.23)	55.36	53.49
<i>Highest Parent Education</i>			
Less than a HS Degree	.06	.05	.06
HS Degree (Reference)	.33	.35	.40**
Voc/Assc. Degree	.17	.18	.18
BA/BS Degree	.24	.24	.21*
Advanced Degree	.20	.18	.15*
Number of Extracurricular Activities	2.18 (2.01)	2.02	2.22**
<i>Type of Extracurricular Activity Involved In</i>			
Glory Sport	.32	.23	.39***
Other Sport	.37	.34	.36
Leadership Activity	.05	.04	.06**
Academic Club	.14	.15	.13
Performance Activity	.17	.19	.17
Importance of Being Cool	3.40 (1.10)	3.52	3.33***
Number of People Dated	4.27 (7.63)	3.48	5.53***
Has Had Physical Intimate Experience	.34	.29	.40***
Total Number of Friends	4.76 (.73)	4.69	4.82***
Frequency of Teasing Others	2.18 (1.17)	2.34	2.00***
Level of Positive Self Image	3.50 (.62)	3.35	3.65***
<i>Time 1 Predictor Variables In Outcome Prediction Models</i>			
Number of Substance Using Friends	.68 (1.29)	.60	.80***
Number of Religious Friends	3.88 (1.64)	3.72	3.97***
Closeness with Parents	2.24 (.44)	2.21	2.26**
Parent Monitoring	2.62 (.75)	2.64	2.59
Parent-Friend Network Closure	3.38 (1.19)	3.18	3.53***
Non-Parent Adult Support	5.07 (3.89)	4.85	5.22**
<i>N</i>	2,975	1,423	1,552

^aStandard deviations not presented for dichotomous variables.^bThe sample is reduced to 2,225 for Time 2 measures.^cPercentage shown of all respondents who report ever attending a post-secondary school (*n* = 1,541)

Table 4.2. Probit Regression Coefficients Predicting Being High Status at Time 1 - National Study of Youth and Religion [Weighted] ($n = 2,975$)

<i>Predictor Variables (T1)</i>	High Status (T1)	
	Probit Coefficients	Standard Error
Age	.003	(.020)
Race		
Black	.496***	(.071)
Hispanic	.382***	(.082)
Other	.148	(.111)
Female	.237***	(.053)
Two Parent Household	-.046	(.062)
Parent Income	.000	(.001)
Highest Parent Education		
Less than a HS Degree	-.115	(.114)
Voc/Assc. Degree	-.133	(.071)
BA/BS Degree	-.149*	(.071)
Advanced Degree	-.147	(.084)
Number of Extracurricular Activities	-.039	(.020)
Type of Extracurricular Activity Involved In		
Glory Sport	.462***	(.063)
Other Sport	.067	(.062)
Leadership Activity	.347**	(.123)
Academic Club	-.037	(.081)
Performance Activity	-.060	(.073)
Importance of Being Cool	-.114***	(.023)
Number of People Dated	.024***	(.004)
Has Had Physical Romantic Relations	.379***	(.061)
Total Number of Friends	.134***	(.034)
Frequency of Teasing Others	-.215***	(.023)
Level of Positive Self Image	.525***	(.043)
Pseudo R-Squared	.137	

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Two-tailed test.

Table 4.3. Propensity Score Weighted Regression Coefficients Predicting Adolescent Outcomes – National Study of Youth and Religion (N = 2,748)

	Adolescent (T1) Outcomes			
	Model 1 GPA	Model 2 Frequency of Drinking	Model 3 Frequency of Marijuana Use	Model 4 Suspended
<i>Predictor Variables (T1)</i>				
High Status	-.001	.352***	.290*	.271*
Age	.012	.124**	.129*	-.207***
<i>Race</i>				
Black	-.151**	-.828***	-.192	.885***
Hispanic	-.006	.098	.370	.311
Other	-.019	-.111	.008	.540*
Female	.200***	-.022	-.415**	-1.00***
Two Parent Household	.036	-.031	-.169	-.087
Parent Income	.002**	.003	.002	-.016***
<i>Highest Parent Education</i>				
Less than a HS Degree	.065	-.024	-.087	.744**
Voc/Assc. Degree	.022	.166	-.021	-.162
BA/BS Degree	.136**	.002	-.346	-.172
Advanced Degree	.263***	.020	-.483*	-.212
Number of Extracurricular Activities	.071***	-.023	-.073	-.086
<i>Type of Extracurricular Activity Involved In</i>				
Glory Sport	.008	.091	-.319	.150
Other Sport	.026	-.010	-.150	-.042
Leadership Activity	-.002	-.177	-.095	-.055
Academic Club	.172***	.043	-.647**	-.764**
Performance Activity	.075	.103	-.039	-.136
Importance of Being Cool	-.019	-.072	.132*	.034
Number of People Dated	-.004	.027**	.019	.032**
Has Had Physical Romantic Relations	-.044	.988***	1.423***	.542**
Total Number of Friends	-.016	-.174*	-.229*	.012
Frequency of Teasing Others	-.037*	.195***	.171**	.100
Level of Positive Self Image	.079**	-.331**	-.138	-.220*
<i>Outcome Predictors Only (T1)</i>				
Number of Substance Using Friends	-.046***	.538***	.658***	.244***
Number of Religious Friends	.001	-.037	-.077	-.061
Closeness with Parents	.1656***	-.237	-.201	-.226
Parent Monitoring	-.007	-.478***	-.523***	.005
Parent-Friend Network Closure	.016	.106*	.007	.044
Non-Parent Adult Support	.009*	-.005	.010	-.023
Constant	2.00***			3.46**
<i>(Psuedo) R-Squared</i>	.23	(.19)	(.30)	(.20)

Note. *p < .05, **p < .01, ***p < .001. Two-tailed test. Propensity matching caliper set at .001. 227 (8% of sample) off-support cases excluded from analysis. GPA estimated with Ordinary Least Squares Regression; Frequency of alcohol use and marijuana use estimated with Ordered Logistic Regression; Suspended estimated with Logistic Regression.

Table 4.4. Propensity Score Weighted Ordered Logistic Regression Coefficients Predicting Young Adult Deviance – National Study of Youth and Religion

	Young Adult (T2) Outcomes	
	Model 1 Frequency of Binge Drinking	Model 2 Marijuana Use
<i>Predictor Variables (T1)</i>		
High Status	.222*	-.128
Age	.013	-.297***
<i>Race</i>		
Black	-.799***	-.021
Hispanic	-.307	-.131
Other	-.259	.145
Female	-.459***	-.518***
Two Parent Household	-.262*	-.121
Parent Income	.006*	.003
<i>Highest Parent Education</i>		
Less than a HS Degree	-.272	.122
Voc/Assc. Degree	.230	.015
BA/BS Degree	-.228	.196
Advanced Degree	-.109	.185
Number of Extracurricular Activities	-.024	.014
<i>Type of Extracurricular Activity Involved In</i>		
Glory Sport	.049	.035
Other Sport	.232*	.068
Leadership Activity	.254	.010
Academic Club	.025	.124
Performance Activity	.258*	.058
Importance of Being Cool	-.113**	-.001
Number of People Dated	.004	.023
Has Had Physical Romantic Relations	.487***	.473**
Total Number of Friends	-.015	.080
Frequency of Teasing Others	.123*	.027
Level of Positive Self Image	.000	-.003
<i>Outcome Predictors Only (T1)</i>		
Number of Substance Using Friends	.004	.180***
Number of Religious Friends	.017	-.040
Closeness with Parents	.218	-.022
Parent Monitoring	-.076	-.092
Parent-Friend Network Closure	.024	.168**
Non-Parent Adult Support	-.020	-.035*
GPA	-.031	-.234**
Alcohol Use	.300***	.058
Marijuana Use	-.004	.304**
High Status X GPA		
(Psuedo) R-Squared	.06	.06
N	2,080	2,080

Note. *p < .05, **p < .01, ***p < .001. Two-tailed test. Caliper set at .001. 227 (8% of sample) off-support cases excluded from analysis.

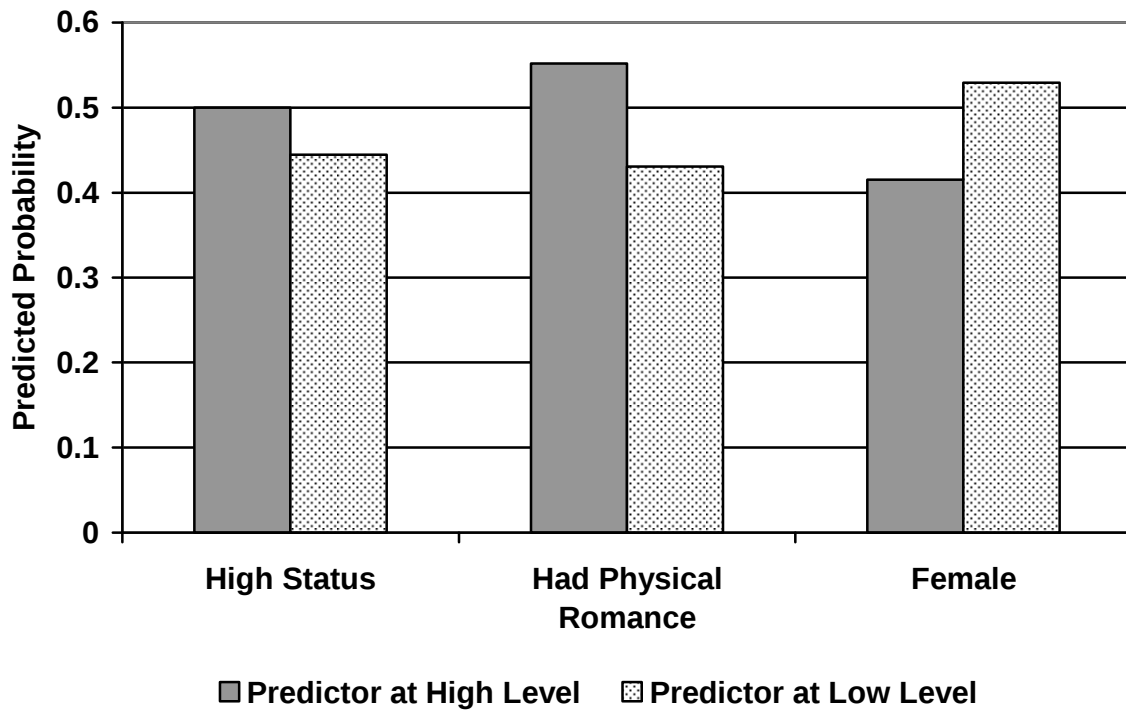
Table 4.5. Propensity Score Weighted Logistic Regression Coefficients Predicting Young Adult Role Stability – National Study of Youth and Religion

	Young Adult (T2) Outcomes		
	Model 1 Stable Post-Secondary Trajectory	Model 2 Disrupted Post- Secondary School	Model 3 Disrupted Post- Secondary School
<i>Predictor Variables (T1)</i>			
High Status	-.251*	.269*	2.052**
Age	-.449***	.453***	.460***
<i>Race</i>			
Black	.289	-.368	-.315
Hispanic	-.133	.120	.085
Other	.711**	-.669*	-.631*
Female	-.149	-.213	-.202
Two Parent Household	.087	-.071	-.055
Parent Income	.005	-.005	-.005
<i>Highest Parent Education</i>			
Less than a HS Degree	-.392	-.261	-.279
Voc/Assc. Degree	-.362*	.362	.322
BA/BS Degree	-.106	-.030	-.031
Advanced Degree	-.006	-.245	-.268
Number Extracurricular Activities	-.003	-.017	-.019
<i>Type of Extracurricular Activity Involved In</i>			
Glory Sport	.028	-.141	-.131
Other Sport	.023	.039	.059
Leadership Activity	.294	-.265	-.243
Academic Club	-.056	.015	.005
Performance Activity	-.057	-.041	-.057
Importance of Being Cool	.006	.088	.088
Number of People Dated	-.001	.031	.031
Had Physical Romantic Relations	.030	.101	.107
Total Number of Friends	-.333**	.246*	.224
Frequency of Teasing Others	-.008	-.045	-.066
Level of Positive Self Image	.094	-.104	-.089
<i>Outcome Predictors Only (T1)</i>			
Number of Substance Using Friends	.057	-.106	-.100
Number of Religious Friends	.062	.006	.008
Closeness with Parents	-.073	-.075	-.100
Parent Monitoring	-.041	.113	.128
Parent-Friend Network Closure	.018	-.043	-.040
Non-Parent Adult Support	-.010	.017	.018
GPA	.108	-.228	.039
Alcohol Use	.091	-.014	-.010
Marijuana Use	-.080	.049	.038
High Status X GPA			-.539*
(Pseudo) R-Squared	.07	.10	.10
N	2,080	1,449 ^a	1,449 ^a

Note: *p < .05, **p < .01, ***p < .001. Two-tailed test Caliper set at .001. 227 (8% of sample) off-support cases excluded from analysis.

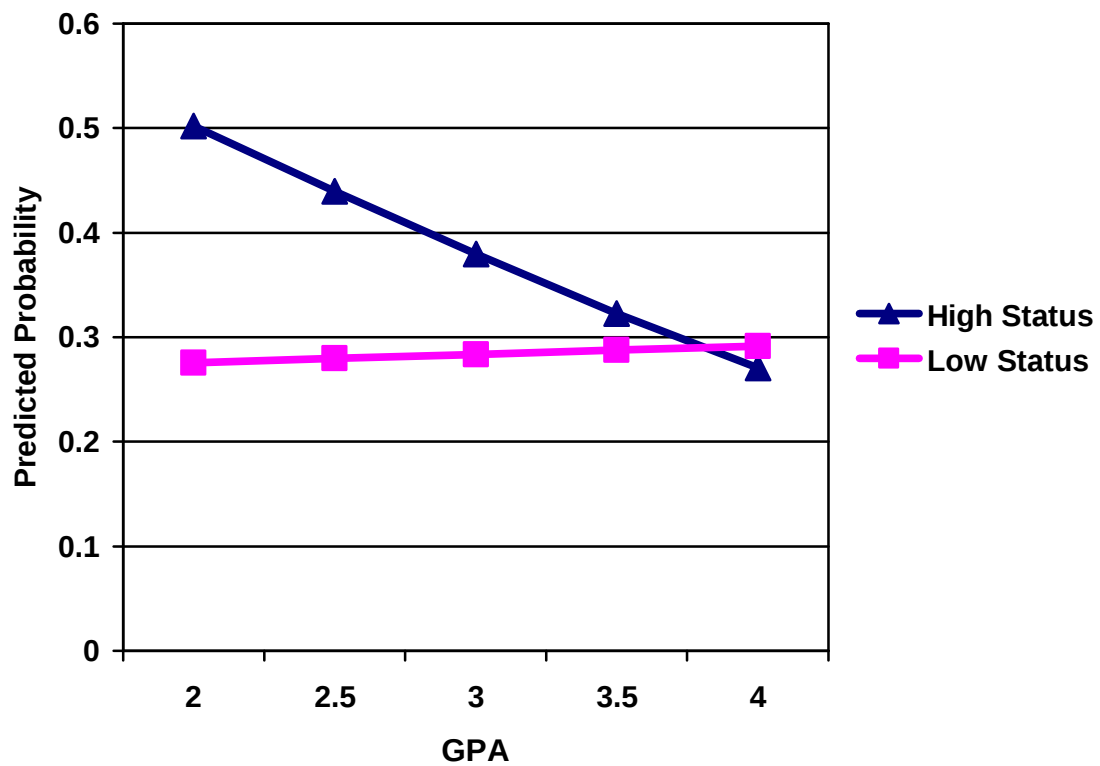
^aSample only includes respondents who report ever attending some form of post-secondary education.

Figure 4.1. Predicted Probability of Binge Drinking One or Two Times or More in the Last Two Weeks at Time 2 (N = 2,080)



Note: Probabilities derived from Model 1 in Table 4.4. All other variables, except the one being estimated, are set at their mean. Status, Physical Romance, and Female are all dichotomous so that “high” means the indicator (e.g., high status) and “low” means the reference category (e.g., low status).

Figure 4.2. Predicted Probability of Dropping Out of Post-Secondary School by Status and GPA (N = 1,449)



Note: Probabilities derived from Model 5 in Table 4.4.

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CHAPTER 5

CONCLUSIONS AND IMPLICATIONS

The over-arching goal of this dissertation has been to integrate insights from the life course paradigm with social psychological models to study major facets of adolescent identity. This Concluding Chapter reviews how the studies have supported and informed the three life course principles that were utilized as the framework for this study (situational imperatives, linked lives, and accentuation). Next, insights about adolescent identity that came from linking the life course paradigm with social psychological models of identity are detailed. Finally, the broader issues of how these integrative steps and novel analytic methods are well-suited to the future study of adolescence, identity, and the life course are discussed.

LIFE COURSE PRINCIPLES AND IDENTITY

Each study focused on adolescents' situational imperatives, which are defined as the unique constraints within which people must operate. One such imperative is the major life transition all adolescents face at the end of high school. This life course concept guided the study to investigate how religious identity may be altered based on the way in which adolescents encounter this transition. When adolescents continue to live with their parents after graduating high school, parents' religiosity and closeness with these parents is the primary determinant of religious identity behavior. But if adolescents move out of the parents' home after high school, they rely on religious salience to determine their young adult religious identity behavior. The situational imperatives are different in each scenario,

differences which in turn lead to a significant divergence in how religious identity is upheld or abandoned. Sociologists of religion have observed that religious involvements are age-graded, with notably low levels during the transition to adulthood (for review see Uecker, Regnerus and Vaaler [2007]). The present findings qualify this age-graded pattern, demonstrating the important role of situational imperatives during this transition.

Another unique situational imperative of adolescents' social world is the high degree of peer definition involved in social type identities. These identities (e.g., Nerd or Skater) form a central part of adolescents' self-definition. Social type identities are different from role-based identities because the former's definition is consistently being re-created through social interaction. Adolescents' assumption of social type identities therefore is not directly connected to filling a particular role.

The finding that adolescents often claim a particular social identity while simultaneously recognizing that their peers do not identify them as such is not surprising. What is interesting, however, is the fact that adolescents rely on different characteristics and behaviors to decide their professed and perceived identities. For example, adolescents who participate in leadership activities are more likely to believe that their peers define them as a Popular-Jock. But this same participation does not significantly influence whether adolescents claim Popular-Jock as their own identity. Not only can adolescents hold discordant self-attributed and peer-attributed identities, but they can profess an identity without meeting the requirements that they acknowledge promote the social recognition of that identity.

What accounts for this peculiar pattern? The data cannot fully answer this question but perhaps adolescents use their professed identity to deal with not being able to attain a

perceived identity. For example, adolescents claim being Normal even when they know they do not possess the characteristics their peers use to define the Normal identity. Or perhaps they use their professed identity to handle being placed in an unwanted perceived identity. For example, adolescents may claim to be an Alternative even when they know they are classified by their peers as a Nerd. In both scenarios, adolescents have found a “way out” of the situational imperatives of their identities being peer defined. They understand that there are particular requirements for being considered a specific identity, but they have created their own conditions for their claimed identity. Thus, there are two sets of situational imperatives that must be considered when examining adolescents’ social type identities: the imperatives that are socially recognized and the imperatives that adolescents use in their own self-definitions.

This nuanced process speaks to this life course principle by illustrating that situational imperatives may be multi-layered. The constraints and opportunities that influence people’s identities may operate in complimentary or contradictory ways, especially depending on the type of identity in question. Socioeconomic status, for example, may be a key component to adults’ role based identities but may have little to do with their personal identity. Using the life course principle of situational imperatives guided this research to discover these complexities, and the life course should continue to enhance its definition of situational imperatives by incorporating this multi-layered aspect.

These findings also highlight the importance of the second life course tenant used in this study: linked lives. In each of the three projects, adolescents’ interpersonal relationships played a key role in determining their identity. For example, adolescents with emotionally close, highly religious parents are likely to be highly involved in religious identity related

behavior. And adolescents with many close friends are likely to have a high status identity in high school.

In both of these cases, however, the absence of certain links also is important in shaping adolescents' transition to adulthood. For adolescents who leave their parents' home after college, ties to religious parents have an indirect influence on religious identity. For these adolescents, their young adult religious identity behavior is shaped directly by their religious salience, but this salience is determined, at least in part, by their parents' religiosity. Therefore, to understand young adults' religious identity one must consider not only their current relationships but also their prior ties, especially for adolescents who experience a significant life transition such as moving out of the parents' home.

In the final study, the loss of a system, or convoy, of linked lives was associated with problematic trajectories for popular adolescents. These high status adolescents had numerous ties during adolescence. Many of these ties most likely provide popular students with a high level of deference. When high status students enter new social situations after high school without these deferential ties, many of them struggle to maintain stable roles. Specifically, popular adolescents who do not achieve academically in high school are likely to drop out of their first place of post secondary education. When high status, low achieving adolescents are forced out their convoy of deferential ties, they encounter serious difficulties. This study highlights that in addition to the loss of specific, meaningful ties (e.g., parents), the transition to adulthood involves the loss of or changes in the nature of adolescents' relationship to their interpersonal ties.

Overall this study supports the life course paradigm's assertion that contemporaneous linked lives are important and that former ties can have enduring impacts even after they

have been broken. But this study adds the finding that former ties, through their absence, also have a direct impact on future life outcomes. The loss of important ties indeed may be difficult, but the loss of the system that supported one's social world can be even more impactful. The life course therefore must focus not only on how linked lives are maintained or acquired but how prior networks shape peoples' understanding of the social world, and in turn how people manage their identity when entering new social situations without these networks.

The final life course principle that has been central to this dissertation is accentuation, which directs attention to the continuity in people's lives. Indeed, several of the analyses found adolescent roles and behaviors are maintained and even worsened in young adulthood. For example, high status adolescents drink alcohol more frequently than their lower status peers. Popular adolescents also are likely to continue this use and engage in problematic, binge-drinking in young adulthood. Being popular in adolescence contributes to an increase in alcohol use, which, even after leaving high school, leads popular adolescents into contexts that heighten that negative behavior in young adulthood. Conversely, popular adolescents who achieve academically do not suffer the same degree of role disruption as their high status counterparts who had a low GPA in high school. Rather, after these high status, high achieving adolescents leave high school, they find social situations that promote their high academic achievement, allowing them to maintain stable educational trajectories.

The life course paradigm directed attention to understanding how adolescents' behaviors would contribute to their young adult lives, and indeed the findings above clearly show that adolescent identities impact young adult trajectories. These findings also demonstrate the importance of examining adolescent behavior, rather than relying on

stereotypic images of adolescent identities. While many people assume that low status adolescents are most at risk for negative consequences in young adulthood, the evidence suggests that popular students, who often are portrayed as model adolescents, are in fact the most likely to be in danger. And the connection between an adolescent identity (i.e., high status) and behavior (i.e., low GPA) most significantly hinders adolescents' young adult outcomes, such as frequent substance abuse and disrupted academic attainment.

Examining adolescent identities and behaviors in combination further informed the accentuation principle. Based on this tenet, most researchers would predict that young adolescents who use substances would most likely find themselves in adolescent crowds that further this behavior. That is, adolescents who use substances should most likely assume a Deviant identity. Yet, the analysis examining the process configurationally shows that when substance use co-occurs with high academic achievement or participation in several extracurricular activities, adolescents actually are consistently likely to take on a Normal identity. This balance of behaviors, some deviant and some pro-social, may temper the full accentuation process, such that instead of becoming Deviant, adolescents may take on less marginalized identities. Therefore, research needs to take a holistic view of adolescent behaviors and experiences in order to fully determine the trajectory of adolescents' identity. Adolescents' ability to manage several, sometimes contradictory, behaviors (e.g., academic achievement and deviance) may lead them into unexpected adolescent and young adult identities.

SOCIAL PSYCHOLOGICAL MODELS OF IDENTITY AND ADOLESCENCE

One of the main objectives of this study was to apply Stryker's (1980) identity theory to adolescent identity. In doing so this dissertation attempted to unify and solidify the

understanding of adolescent identities. Furthermore, this application would help uncover how life transitions influence the connection between the identity theory mechanisms.

The first study clearly shows that identity theory is a valid theory of adolescent role based identity. Stronger connections to religious parents (identity commitment) increases adolescents' likelihood of using religion to direct their behavior (identity salience), which in turn increases the amount of time adolescents devoted to religious activities (identity enactment). Identity theory, therefore, may be helpful in explaining other adolescent identities and could consolidate several, currently disparate, areas of adolescent research. For example, theories of adolescent deviance and academic achievement both posit ties to significant others and internalized dispositions as primary forces pushing adolescents to commit crimes or succeed in the classroom. Research that places both of these outcomes within the identity theory framework may simplify the explanation of adolescent behavior. Studies that conceptualize deviance or achievement as identity relevant behavior would focus attention on how similar factors lead adolescents towards each path.

Importantly, however, the type of transition that adolescents make into young adulthood alters the links between the identity theory mechanisms. Connections to parents continue to shape the religious identity of adolescents who remain in the home after high school, whereas salience becomes the key factor determining religious identity for adolescents who move out of the parents home. Identity theory does not account for such changes. Future research could examine how other transitions influence the connection between commitment, salience and behavior. For example, a parent losing a job and being forced to relocate may create a similar disruption, which in turn could force the child to rely on salience to guide his/her student or religious identity behavior. Research that continues to

investigate how different types of transitions influence the identity process will add depth to the understanding of how adolescents maintain and change their identity.

To directly address the need to further examine adolescent identity stability and change, the second project focused on social type identities. Specifically, this analysis tested the pervasive assumption that adolescent identities are temporary and fluid, hats to be tried on as adolescents so desired. Additionally, this project compared ascribed versus achieved factors' influence on identity change, with special attention on the assumption of a Normal identity. These analyses endeavored to elucidate the active versus restrictive nature of adolescent identities.

Almost half of the sampled adolescents report a change in their identity over a one year period, suggesting that adolescents change identities frequently. Yet, further analysis revealed that a majority of this movement is to non-specific identities, such as Normal or None. And the most common pattern within each identity is for adolescents to maintain a similar identity over time. Although there is a high level of overall change, the dominant pathway indicates these alterations are moderate, with most adolescents moving to a general identity such as Normal. This finding contradicts the underlying assumption of psychological theories of adolescent identity (i.e., adolescents make frequent, substantively meaningful identity alterations).

When adolescents do change social type identities, achieved factors play a more significant role in predicting the possible alterations than ascribed characteristics. Across the range of identity changes, achieved factors are more frequently related significantly to the given change and exhibit a larger magnitude of influence than ascribed characteristics. These findings suggest the determination of adolescents' social type identity is an active process.

Several of these achieved factors, such as substance use and club participation, could be actively attained by the adolescent. For example, if a youth wanted to assume a Deviant identity, she could start smoking marijuana easily enough and increase the likelihood that her peers would recognize her as a Deviant. When this study treated the characteristics configurationally, however, the findings indicate that the process may not be quite so simple.

To consistently take on a Normal identity, adolescents have to balance a complicated combination of traits and behaviors. That is, adolescents cannot alter a singular characteristic and consistently assume a Normal identity. Further, the majority of these pathways include a unique combination of ascribed and achieved factors at high and low levels. For example, male adolescents who have a high GPA and do not participate in many extracurricular activities and use substances at above average levels are consistently likely to become Normal. Or, female adolescents who have a below average GPA but participate in several activities and use substances at high levels are likely to take on a Normal identity. These complex pathways suggest that the Normal identity is not the catch-all category that prior research has labeled it. Rather, the findings indicate that attaining the Normal identity is in fact an accomplishment for some adolescents, primarily because it prevents being labeled with a devalued identity.

This final finding adds further nuance to the conclusions in regards to the level of overall change in adolescents' social type identities. As noted, adolescents' most common identity change is to take on the Normal identity. Initially I interpreted this finding as showing that the majority of adolescents simply drift to the middle, rather than take on significantly different identities. But the combinations of behaviors that lead to a Normal identity, questions this perspective. Perhaps a portion of adolescents who change into the

Normal identity do so as an active identity assumption (i.e., they try on the Normal hat). Conceptualizing the Normal identity as a substantively meaningful identity makes the final characterization on the fluidity of adolescent identity even more difficult.

Future research should continue to investigate what identity change *means* for adolescents. That is, when adolescents report an identity change do they perceive it as something they actively controlled or as a label that was applied to them. Such investigations would be particularly beneficial in terms of the Normal identity. Are adolescents striving to attain this identity or are they forced into it because they are truly average? The answer is most likely both, but research that examines what differentiates which path adolescents fall into will continue to enhance the understanding of the role that these social type identities play in adolescents' lives.

The final aspect of identity addressed by this dissertation is how the status of adolescent identities can impact contemporaneous and young adult outcomes, such as substance use or role stability. Previous research predicts that high status adolescents should be funneled into institutions and activities that enhance their pro-social characteristics thereby leading to positive life outcomes. I argued, however, that the end of high school could serve as a significant turning point, potentially breaking the cycle of reciprocal continuity and actually endangering high status adolescents during young adulthood. Examining the enduring impacts of adolescent identities in this way helped build on life course research by informing how turning points influence "positive" trajectories, as the majority of prior research has focused on how turning points impact the desistance of negative behaviors.

Indeed, the results contradict the traditional assumptions of the Matthew Effect, which contends that people at the top of the social hierarchy are rewarded, thereby furthering their superior status. Popular adolescents are significantly more likely to suffer from role instability, both in employment and academics, than are their less popular peers. Entering a new social environment proves to be a stressful situation for formerly popular young adults, which also leads to higher rates of problematic alcohol use. Adolescents who hold high status identities but do not actually deserve that superior status (i.e., had low academic achievement) are the most at risk to experience a disruption in their post high school academic trajectories. Such role instability and heavy substance use could have lasting impacts on these young adults' occupation attainment and well being.

The end of high school, therefore, can serve as a turning point. But instead of helping to break adolescents from negative pathways, this step towards adulthood creates difficulties for adolescents who generally are thought to be in the best position to succeed. This finding calls for greater attention to how “successful” adolescents manage the transition to young adulthood. Some adolescents are able to hide significant shortcomings (i.e., low GPA) with their high status identity. But the transition out of high school strips this “status disguise,” creating severe consequences. Future research should continue to examine how all adolescents adjust to the new social environment of young adulthood. Perhaps other positive adolescent traits, such as participating in numerous extracurricular activities or even close relationships with parents, also could have unexpected, negative impacts during young adulthood.

INSIGHTS ON THEORY, METHODS, AND SUBSTANTIVE IMPLICATIONS

The ultimate objective of this study was to enhance the field of adolescent identity by integrating theory, methods, and evidence. I now detail how the three projects have contributed to each of these areas. The most definitive conclusion of these three projects is the benefit of combining the life course paradigm with social psychological theories. For too long, many of the latter have remained cross sectional frameworks that do not incorporate elements of time, aging or life transitions in their predictions. Yet, this study shows that significant life changes, such as going to college or leaving the parents home, can have a major impact on the primary mechanisms of social psychological theories.

As already detailed, identity theory would be well served to directly include the influence of transitions into how it conceptualizes the causal links between commitment, salience, and identity related behavior. Doing so will help research in areas beyond the study of adolescence. For example, identity theory could be a useful framework for understanding the family. The manner in which people manage their identity through the transition to marriage or childbearing may have significant implications for the way in which families structure the household division of labor, how children are reared, and the potential for family dissolution. Similarly, studies of the labor force could benefit from the application of identity theory. Given the current state of the economy, understanding how people manage their occupational identity through potential and realized layoffs is critical. Despite its potential utility to these fields, identity theory has not been an integral part of their examination. But the inclusion of a life course perspective, specifically accounting for the influence of transitions, may increase its application to future research in these areas.

Similarly, status characteristics theory generally is not conceptualized as a longitudinal theory. Rather status markers are portrayed as static traits upon which people

base their actions. And status characteristics theory mainly focuses on explaining how high status markers help individuals achieve ends that people without such markers cannot attain. Yet, this study illustrates how transitions significantly change the meaning of certain status characteristics, which in turn alters their influence. Over significant life transitions and as people's network of linked lives is transformed, status markers can lose their accompanying deference. The benefits that people with these high status identities receive actually can hinder their future development.

Status characteristics proved to be an insightful theory in guiding the expectations and predictions of this study, but if it can more directly include a life course perspective into its framework, it stands to be applicable to a much broader range of substantive research. For example, this integrated theory could be helpful for understanding how CEOs of major corporations or professional athletes deal with the transition to retirement. Just as popular adolescents must reorientate their understanding of social interaction when they leave high school, people holding these high prestige occupations may encounter difficulties when they are no longer surrounded by individuals who support the superiority of their position. Therefore, the next step in status characteristics research should be to investigate its assumptions as people experience real world transitions. Such studies will help to more completely integrate a developmental element into status characteristics theory's predictions and conclusions.

Although this study completely relies upon quantitative analyses, the use of multiple techniques not only aids the questions under examination but also reveals several notable aspects of adolescence. Foremost among these methods was the application of Qualitative Comparative Analysis (QCA). Using this method demonstrates the unique confluence of

ascribed and achieved traits in leading adolescents to take on a Normal identity. Several of the final solutions resulting from the QCA procedure would not have been identified if only an additive technique had been used. The QCA analysis showed there are multiple paths to the same identity for adolescents and that each path requires a complicated configuration of behaviors and characteristics. This type of equifinality should be recognized in other studies of adolescence, and techniques that allow for it must be implemented.

This directive is even more important given the high level of diversity in adolescents' experiences that was shown by the QCA procedure. Even when only using five predictors, distinguished by being at or above the mean on each, there is an almost equal dispersion of adolescents into each of the 32 possible configurations of traits. Adolescents cannot be easily described by only a few dominant combinations of characteristics and behaviors. A crucial goal of future research should be to investigate this diversity, even before considering possible outcomes to which each path may lead. QCA is the ideal technique to accomplish this type of analysis because it can be used to map respondents on very complex combinations of numerous variables. Studies that can further the understanding of the unique paths that adolescents follow will deepen the appreciation for adolescent life, hopefully enhancing the recognition of its vital contribution to the life course.

Propensity score matching also proved to be an extremely useful analytic strategy. This technique more effectively isolated the influence of an adolescent trait, popularity, that is very difficult to estimate because of its endogeneity with other key adolescent characteristics. The combination of longitudinal data with propensity score matching provides a more reliable estimate of the influence that popularity has on adolescent and young adult outcomes. Numerous other "treatments" suffer from a similar problem in

adolescent research. For example, scholars still contest the independent influence that particular types of activity participation, such as athletics, have on academic achievement. Using propensity score matching to investigate this association would help scholars interested in policy to more concretely understand the impact of such participation, thereby aiding their recommendations for potential reform.

Finally, for researchers not interested directly in adolescent identity, this study contributes to the fields of religion and education. The first project brought a useful theoretical framework to what has been relatively fragmented research on adolescents' religiosity. The results show there are two primary sets of factors leading to the maintenance or desistance of religious behavior during the transition to young adulthood: ties to parents and internalized religiousness. Although previous studies have shown both factors to be important, this study highlights the indirect influence of parents after adolescents move out of the home.

For adolescents taking the significant step toward adulthood (i.e., leaving the parents home), the key mechanism linking adolescent religiosity to adult religiosity is religious salience. The likelihood that adolescents use religion in making decisions is a central predictor of whether they continue to be highly involved in religious activities after losing a direct connection with their parents. But it is clear that parents "packed" the salience bag. That is, parents shape the cognitive schema adolescents use in guiding their religious identity once they are out on their own. Thus, parents play a vital role in determining the eventual religiosity of young adults, but this influence is moderated through a cognitive process.

The results indicate that scholars who point to structure (i.e., parents) and those who point to psychology (i.e., salience) as the primary predictor of young adults' religious lives

are both right. The current study, however, shows that the type of transition into adulthood determines which of these forces dominates. This finding moves research beyond the potentially endless debate between the preeminence of either factor, and instead pushes future studies to examine how other steps toward adulthood, such as getting married or having a child, may alter the continuity of adolescents' religiosity during young adulthood.

This study contributes in two main ways to the sociology of education. First, Chapter 3 illustrates how the types of activities schools offer directly impacts the types of identities adolescents assume. Even more importantly, activities may shape the meaning of these identities. Both performance activities (e.g., theater or band) and club activities (e.g., the chess or debate team) increases the likelihood that an adolescent changes to a None identity. Participants in the former activities may view their None identity as an independent or rebel identity, explicitly rejecting other crowds. For participants in the latter, however, the None identity may be an isolate identity. These adolescents may feel rejected by other crowds. The substance of these different activities may be contributing, in part, to the different meanings of these identities. Therefore, if school administrators recognize the connection between club participation and the None identity, they may be able to work within these types of activities to enhance their participants' feelings of self worth and independence. In other words, school leaders may be able to imbue club activities with the creativity and spirit that is normally associated with performance activities.

Of course, this study cannot completely determine whether adolescents involved with performance activities see the None identity positively. Rather, they, too, may be taking it on because they feel prohibited from taking on other identities. Future studies that treat the None identity as a substantively meaningful label, rather than as a "don't know" response, will help

determine exactly what this identity means for the adolescents who proclaim it. And if None is indeed primarily an isolate identity, then schools need to work to understand how adolescents who are engaging in school activities continue to feel isolated from their peers. In turn administrators can work to structure all extracurricular activities to promote greater feelings of inclusion among participants.

Secondly, this study calls for a renewed consideration of the dangers of adolescent status hierarchies. The existing research has been successful at raising awareness about the negative consequences of this stratification for low status adolescents. The current study, however, shows that an equal amount of concern should be paid to high status adolescents. Specifically, researchers and educators alike must move beyond traditional perceptions to fully examine adolescents' behaviors, regardless of their identity status. Adolescents who are given high status by their peers but are unable to achieve at high levels in the classroom are likely to face serious struggles when they leave high school. Thus, teachers and administrators must be aware of these status hierarchies and give special attention to popular students who too often are allowed to get by based on their status alone.

Further, high school educators can help prepare popular adolescents for the transition to adulthood. Prior research has called for educators to help low status students manage their emotions and self esteem to facilitate the transition to new social settings. Similarly, teachers and parents should help high status adolescents manage their expectations for behavior. Part of this management would be taking adolescent substance use seriously. The results show that high status adolescents are the most frequent users of alcohol. Recognizing that this behavior can lead directly to more problematic drinking habits in young adulthood should increase efforts to curb such behavior before adolescents make the transition to adulthood.

Adults also should begin to manage popular adolescents' expectations about the meaning of their status. That is, adults should help high status adolescents realize that the deference they receive in high school will not last forever. Perhaps putting popular students in social situations in which their status does not apply, such as a summer college course, would assist in making the transition to adulthood less dramatic. Before such interventions are put into practice, however, future research should continue to examine the mechanisms driving the negative relationship between adolescent status and young adult role instability. This study clearly demonstrates the need for such research.

FINAL THOUGHTS

This study admittedly set out to achieve a set of lofty objectives and took on a major substantive area. Fully examining adolescent identity during the transition to adulthood could not be accomplished in a single pass. Most likely this dissertation raises as many questions as it answers. Hopefully it also provides a set of useful theoretic, methodological, and substantive tools for future research to address these new questions. Above all else this study demonstrates the complexity and nuance of adolescent identities and moreover shows the significant, enduring importance of these identities beyond adolescence.

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APPENDIX A:

CONSOLIDATION OF IDENTITIES IN CHAPTER 3

Alternative

Rocker
Punker
Skater

Deviant

Partier
Druggie
Tough
Junk

Don't Know

Don't Know

Ethnicity

Black
Hispanic
Mexican
White Mexican
Asian
Chinese
Pacific Islander
Vietnamese
Mixed Ethnicity
Other Ethnicity

Miscellaneous

ROTC
Farmer
Performer
Black Wanna-Be
Several Crowds
Miscellaneous
Wanna-Be Popular
Generic Wanna-Be

Nerd

Brain
Nerd

None

None
Loner
Outcast

Popular- Jock

Popular
Popular Nice
Jock

APPENDIX B:

SENSITIVITY ANALYSIS OF HIGH STATUS CODING IN CHAPTER 4

The coding of status used in this analysis distinguishes 50% of the sample as being “high status.” An argument could be made that such a distinction is a misrepresentation of high status because the majority of adolescents should not be considered as having high status. To address this concern I conducted several sensitivity analyses to further examine how the coding of status influenced the current findings (all analysis available upon request).

First, two restrictive distinctions of status were created. For the first variable, a respondent was classified as high status if he/she reported being a part of the popular group “a lot” and to be teased a few times a year or less. This coding produces an indicator variable, in which 29% of the sample is classified as high status. The next variable was even more restrictive and only considered respondents as high status if they reported being in the popular group “a lot” and claimed to be never teased, leading to an indicator of status in which 20% of the sample is coded as high status.

Next, all the analyses were estimated using each of these new high status measures. The results for both variables were similar. As with the presented results, there was not a significant difference between the high and low status students’ level of academic achievement in high school. And the high status students were more likely to drink frequently and be suspended in high school than the low status students. Unlike with the less restrictive coding of status used in the presented analysis, these new measures did not have a significant relationship with adolescent marijuana use. Still, the sensitivity results generally support the conclusions that high status students are more likely to commit deviant acts in

adolescence than were low status adolescents and that there is no difference in high school academic achievement based on status.

The major difference from the presented results and these sensitivity analyses was in the longitudinal models. When using the more restrictive measures of high status, there were no significant relationships with any of the young adult outcomes. Although all of the relationships were in a similar direction, none of the coefficients for high status reached standard statistical significance.

These different measures, however, may fail to achieve statistical significance in the longitudinal models for analytic reasons. As noted, in both of these categorizations of high status a much smaller proportion of adolescents are coded as high status, and this percentage drops even more due to attrition over the 4 year follow up. Using a more delineated indicator of high status may increase measurement error, which could lead to bias in the standard errors. That is, the top half of students who have a relatively higher level of status than the bottom half may be a stable concept, making it “easier” to measure and produce a reliable indicator of high status. Conversely, determining the top 20% of students in terms of status may be more difficult and susceptible to volatility (i.e., the top 50% of high status students generally remain the same but the top 20% may change quite frequently). This volatility could introduce measurement error, which could lead to the non-significant results found when using these different measures of status.

Still, given the different findings from the different coding of status one could argue that the measure used in this study actually coded some unpopular students as high status. This group of unpopular students would presumably be driving the significant longitudinal relationships. This possible scenario is highly unlikely for several reasons.

First, it is theoretically untenable. For this argument to be true given the observed relationships, one would have to contend that the students who are most likely to be using substances and get suspended in high school *and* binge drink and suffer role instability in young adulthood are the somewhat but not extremely popular students (i.e., the third status quartile). Yet, there does not seem to be any substantive or theoretic support for such a claim.

Second, the argument does not hold up given the empirical results of the sensitivity analyses. As noted, when using a more restrictive coding of high status (i.e., moving the 3rd quartile of status students into the low status group) the relationship between status and the young adult outcomes becomes insignificant. If these moderately popular students were driving the significant negative consequences, then the relationships should have reversed and been significant because this moderate group was now in the reference category.

To further examine this possibility, however, the analyses were estimated with status measured as a 3 category dummy variable, setting the moderately popular (i.e., 3rd quartile) students as a reference category. These analyses were not run with propensity score matching because the “treatment” was no longer dichotomous. If the argument against the current results were true then both the low status and very high status students should be significantly different from the moderately popular group. In every model the moderately popular students were *not* statistically different from the very popular group, indicating that the moderately and very popular students are more like each other than the low status group. These results support the original coding that distinguishes both of these top half groups as high status.