Roger J.R. Levesque Editor

Encyclopedia of Adolescence



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With 47 Figures and 74 Tables



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ISBN 978-1-4419-1694-5 e-ISBN 978-1-4419-1695-2 Print and electronic bundle under ISBN 978-1-4419-1696-9 DOI 10.1007/978-1-4419-1695-2 Springer New York Dordrecht Heidelberg London

Library of Congress Control Number: 2011934914

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Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Preface

On behalf of my fellow advisory board members, authors, and the reference publishing staff at Springer, I welcome you to the *Encyclopedia of Adolescence*.

This comprehensive, five volume reference features more than 700 substantive essays covering a broad spectrum of topics central to our understanding of the adolescent period. The majority of these essays are authored by established researchers who have published empirical work and commentaries specifically on their essays' topics. In addition to these essays, the volumes contain shorter essays that provide analyses of key terms, concepts, theories, and legal doctrines that relate to the current empirical understanding of adolescence. Together, these essays are meant to provide readers with a broad sense of research relating to adolescence. They also are meant to highlight important social and policy issues needed to understand more fully the period of adolescence and its peculiar place in society.

The complexity of adolescent life, as well as the diverse and numerous disciplines seeking to understand it, certainly challenges efforts to create a succinct yet comprehensive compendium. The broad diversity of topics and their relationships make it difficult to do justice to topics while, at the same time, not repeat materials in other essays. In response to these challenges and difficulties, the essays' topics were developed by envisioning four major groups of topics. Given the topics' centrality to this project, it is worth highlighting their nature and general content.

The first group deals with the *self, identity and development in adolescence*. This cluster of essays covers research relating to identity (from early adolescence through emerging adulthood), basic aspects of development (biological, cognitive, social, etc.), as well as foundational developmental theories. In addition, this group of essays focuses on various components of identity, such as those relating to gender, sexual, civic, moral, racial, spiritual, and religious aspects of individuals' social and psychological sense of who they are.

Essays relating to *adolescents' social and personal relationships* constitute the second group of topics. Essays within this broad area of research focus on the nature and influence of a variety of important relationships. The essays focus, for example, on families, peers, friends, sexual and romantic partners as well as significant nonparental adults.

The third cluster of topics centers on *adolescents in social institutions*. Essays in this category address the influence and nature of important institutions that serve as the socializing contexts for adolescents. These major institutions include schools, religious groups, justice systems, medical and other therapeutic contexts, cultural contexts, media, economic statuses, social services and youth organizations.

The fourth and final cluster of topics involves *adolescent psychopathology and mental health*. This group of topics focuses on the wide variety of human thoughts, feelings and behaviors relating to mental health, from psychopathology to thriving. Major topic examples in this group include deviance, violence, crime, delinquency, pathology (DSM), normalcy, risk, victimization and positive youth development.

The ability to categorize hundreds of topics into reasonably distinct groups proved considerably useful. Most notably, it helped avoid being overwhelmed by the enormity of the task, as several hundred potential topics were culled from journals, books, and a variety of other sources that report on the adolescent period (e.g., media outlets, government reports, and professional association's mission statements and resources). By identifying and assisting in sorting topics, the approach produced the most systematic and comprehensive compendium of empirical findings relating to the period of adolescence. Purposefully included among these topics are some that have yet to be explored empirically as much as might have been expected. Those less explored topics are presented to offer researchers areas in need of further study, highlight important research gaps, and provide an authoritative view of

the extent to which current research supports images and views of adolescents. It is hoped that the depth and breadth of this endeavor will serve well students, educators, researchers and practitioners seeking authoritative information about the period of adolescence, in terms of what we know, do not know, and should know.

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Roger J. R. Levesque, J.D., Ph.D., is Chair and Professor of Criminal Justice at Indiana University. He received his J.D. from Columbia University School of Law and his Ph.D. in cultural psychology from the University of Chicago. In addition to authoring over 50 articles and book chapters, Professor Levesque has published over 10 books, most of which deal with the legal regulation of adolescence and family life. His books have earned awards from the Society for Research on Adolescence as well as the American Psychology and Law Society. The Association for Psychological Science (APS) (previously the American Psychological Society) has elected him Fellow in recognition of his outstanding contributions to developmental science; and the American Psychological Association (APA) has elected him Fellow in recognition of his contributions to the field of psychology and law. Professor Levesque currently serves as Editor-in-Chief of Springer's *Journal of Youth and Adolescence* as well as the *Advancing Responsible Adolescent Development* book series.



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Abandonment

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Although children who are abandoned tend to be infants or young children (who are called foundlings), abandonment still is important to consider when studying the period of adolescence. Abandonment potentially relates to adolescents in two major ways. First, abandonment is relevant to adolescents in that they can be abandoned or in that the feeling of being abandoned leads youth to leave their parents by, for example, running away from their homes (Thompson et al. 2008). Second, abandonment is relevant to adolescents because they may be at risk for abandoning their own children. These propositions may be true but, regrettably, research on abandonment is considerably inadequate and does not support them conclusively. For example, researchers and policy makers lack reliable statistics regarding how many children are abandoned, their basic characteristics and situations, as well as the characteristics of those who abandon them. Even the most comprehensive federal statistics reporting on the incidence and common features of child maltreatment do not report abandonment rates or characteristics (U.S. Department of Health and Human Services 2009). Thus, studies do not have a firm grip on the number of cases involving abandonment, but they do provide a sense that it is an important issue that may affect adolescents.

Abandonment turns out to be a much more complicated legal and social concept than might be initially imagined. Legally, children are abandoned when their parents leave them without the supervision of an appropriate person for what is deemed to be an inappropriate amount of time. Typically, the parents do not intend to return and relinquish their control over

the child's care; and the child is abandoned outside of legal adoption. As with other types of child maltreatment, abandonment is regulated by both civil and criminal law. Child abandonment is a criminal offense in every state; but what constitutes abandonment varies from one state to another. Variations focus on what the parents do, the child's characteristics, and the penalties. Much variation exists in the civil context as well. Variation in this context also focuses not only on what parents do as well as on the child's characteristics and situations but also on the rights of parents involved and the types of resources that might be provided to the parents and families. In the civil context, abandonment also arises when a court decides to terminate the natural rights of parents on the grounds of abandonment in order to permit adoption or other state interventions on behalf of the child. Importantly, pursuing abandonment in criminal or civil contexts has consequences, especially in terms of protections individuals would have and what would be appropriate outcomes for the parents as well as the children: criminal justice systems would aim to prosecute and punish parents in ways that might remove them from their homes while civil, child welfare systems would aim to consider, in appropriate cases, the potential rehabilitation of parents as well as reunification with their families.

The law remains equally complicated when dealing with abandonment from the perspective of adolescents who might be the ones to abandon their own children. Adolescents who have children may be at higher risk of abandoning their infants, and this supposition has led to important legal developments relating directly to the legal regulation of abandonment. Although adolescents may be deemed at higher risk, research has yet to provide supporting evidence to that effect. It has been adolescent (and other young) mothers, however, who have tended to attract attention from society and policy makers. That attention recently contributed to the development of "Safe Haven Laws." Every state now

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has laws permitting parents to abandon their children at a safe place, such as with fire station departments, emergency medical personnel, hospitals, police departments, and in some cases, churches (Pollock and Hittle 2003). Although these laws have been described as permitting parents to abandon their children anonymously and without fear of prosecution, that description actually may not be the case depending on state laws. Again and as with all other areas of child welfare and criminal law, laws can be quite complicated and can vary from state to state.

State laws vary considerably in their approaches to regulating safe havens for children who would be abandoned. They vary in the manner that they restrict the age of babies who can be legally relinquished, vary in terms of who they allow to relinquish the children, and vary to the extent that they assure anonymity. Equally importantly, they vary in the specific protection granted to those who seek to relinquish, for example, if a child has been abused; the case is likely to be treated as an abandonment rather than relinquishment, and the relinquisher can be prosecuted for their abusive actions. States also vary in terms of who can accept the baby and the protections that they would get from liability. In addition, states vary in terms of the rights of the relinquishing parent (e.g., whether they can change their minds) as well as the rights of the children (e.g., whether their medical history can be taken by the relinquisher). The rights of fathers also vary, with some states requiring a search for the natural father. Although it may be a general rule that safe haven laws permit abandonment without fear or prosecution, then, what is permitted certainly varies and that variation highlights well some of the important considerations that can arise in cases of abandonment.

In addition to their remarkable variation, safe haven laws are notable for the extent to which they have attracted considerable controversy as well as their relative ineffectiveness (Sanger 2006). Although they have helped assuage fears of children being killed or otherwise harmed by parents who no longer wanted them, available evidence has yet to support their effectiveness (see Pollock and Hittle 2003). The legal responses also have been seen as problematic in that they do not seek to identify and serve the young women who feel isolated and lack access to resources and support in times of crisis leading to abandonment. This lack of a broader perspective makes this area

important to the study of adolescence as it necessarily involves the need to address broader issues relating to adolescent sexuality and pregnancy, enhance communication among youth, families, and communities, and develop supportive networks for adolescents in need. These broader issues go to the core of the study of adolescence as well as the core of efforts that can eventually address abandonment and its consequences.

Cross-References

► Runaway Youth

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Abnormality

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Conceptions of abnormality are at the center of the study of mental health and healthy development, both generally and as applied to the adolescent period. Yet, what constitutes abnormality continues to be the subject of considerable debate and controversy. A close examination of the study of abnormality and disorder reveals that there are many ways to approach the notion of abnormality, all of which have their limitations and strengths.

Controversies surrounding conceptions of disorder and abnormality emerged quite forcefully a few decades ago, especially in popular culture, as they were sparked by the writings of Thomas Szaz (1971, 1974) who argued that mental disorders could be conceived as a function of subjective societal values and were, in essence, myths. Although his model was unable to

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explain why some socially disapproved beliefs were not deemed pathological (such as rudeness or some forms of racism), his conceptualization did focus on a key point of abnormality, which is that abnormality at least partly constitutes conditions deemed undesirable and that societal conditions figure prominently in determining what should be deemed undesirable in the first instance. This approach was championed by many who questioned whether the concept of mental disorder actually existed, and viewed it as a myth that justified the use of medical power to intervene in socially disapproved behavior (see Foucault 1964/1965; Sarbind 1969). This skeptical view, having made important points, still left much to be examined, as highlighted by other efforts to define and understand abnormality.

One of the most expected ways to conceptualize abnormality relies on the statistical conception of normal. Cohen (1981) provided the most authoritative statement on a statistical approach to disorder in which he viewed disease as a quantitative deviation from the statistical norm. The approach has considerable merit, as statistical deviations are critical to several definitions of disorders, such as intelligence. Yet, statistical deviation above the norm may be viewed as healthy, and even arguing that deviation must be in the negative direction to be deemed abnormal in the sense of being a disorder remains problematic since some behaviors can be statistically deviant but still not disorders (such as immoral or criminal behaviors). Still, disorders often are statistically deviant, and determining what would constitute a disorder would require imposing either subjective or objective judgments on that statistical deviance.

Another approach to determining what constitutes abnormality relies on the notion that it simply is what health professionals treat (see Taylor 1976). This approach has some appeal in that it takes a pragmatic approach focusing on conditions that elicit interventions from mental health professionals, centers on patients and professionals, and may circumvent issues relating to broader societal value judgments. Still, the approach has its limitations in that many conditions treated by professionals (e.g., pregnancy or parent-child conflicts) may not be pathological yet still evoke a need for professional assistance. Perhaps even more problematic, this approach runs the risk of having both patients and professionals being wrong about what constitutes a disorder and, equally problematically, it

can lead to not viewing disorders as disorders until those in treatment view them as such. Thus, this approach may have considerable merit but it still lacks a general concern for broader societal or group judgments.

Other models focus less on enlisting social criteria and personal value judgments and more on invoking biological criteria. Some, for example, have argued that abnormality should be defined by relying strictly on such biological criteria derived from evolutionary theory (see Kendell 1975). These would include identifying as abnormal conditions that reduced one's life span or reduced reproductive fitness. Although this approach has the advantage of trying to be objective, it still necessarily relies on value judgments in determinations of what would be considered disadvantageous. The approach also encounters important limitations in that many disadvantages may be due to environments, and many disadvantages are tied to intrinsic conditions (males die younger than females) and not to disorders.

Yet another approach conceives of abnormality as harmful dysfunction. This approach (see Wakefield 1992) champions a view that takes into account social values in the concept of harm and more objective approaches through focusing on dysfunction. The approach seeks to distinguish conceptions of abnormality that are socially constructed from those that are arguably more scientific. Although the approach has considerable merit, it too is subject to limitations in that there are no clear cut definitions of dysfunction and adaptive functions, and there may not be clear dividing lines between normal and abnormal functioning.

Arguably, the most widely accepted view of abnormality and disorder comes from the *Diagnostic and Statistical Manual* (DSM), now in its 4th edition and published by the American Psychiatric Association (2000). The DSM's definition has been relatively unchanged since its third edition. Its criteria for disorder focus on notions of distress, disability, expectability, and dysfunction. The concept of disability is meant to capture behavioral and observable components while the notion of distress seeks to capture the more subjective and experiential aspects of mental disorder. The focus on expectability highlights a focus on statistical norms and what is likely within a normal range. The focus on dysfunction denotes a breakdown or disruption indicating a failure to perform functions,

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which was meant to provide a more objective view of abnormality that resisted a focus on social value judgments. Although the DSM's approach brings together many others, it too has been widely criticized, as illustrated by studies highlighting different manifestations of mental disorders worldwide (see, e.g., Kleinman and Cohen 1997) as well as by commentaries highlighting the inherent problems with the use of terms like "dysfunction" to define disorder (see, e.g., Wakefield 1992) and arguing that the approach to diagnoses lacks sufficient clinical utility (see Andersson and Ghaderi 2006).

Controversies revolving around definitions of abnormality are likely to continue. They likely are to do so given the challenges of identifying clear criteria for abnormality and changing societal views of what can be deemed valued. Still, despite these controversies, researchers and theorists do tend to rely on overlapping criteria for what constitutes abnormality, a tendency that helps to account for the remarkable consensus that does exist regarding whether specific conditions could be deemed abnormal.

Cross-References

- **▶** Disease
- **▶** Normality

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Abortion Counseling

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Unwanted pregnancies leading to abortions are common life events, and they relate directly to youth. Approximately 22% of the 205 million annual pregnancies end in abortion (Sedgh et al. 2007), and in 2004 individuals less than 19 comprised approximately 17.4% of completed abortions while 32.8% were ages 20-24. Despite its prevalence, abortions raise a host of social and legal issues that challenge basic values and foster intense controversy. Indeed, researchers often charge that the scientific enterprise in this area of study is being manipulated and that research findings are being misrepresented to justify particular social agendas, especially efforts involving access to contraception and abortion (see Russo and Denious 2005). Those controversies likely will continue, especially as they relate to mothers' mental health outcomes relating to abortions, and particularly as they relate to adolescents and their status (with research noting varied outcomes and mostly focusing on adult women; see Major et al. 2009). Although controversies tend to focus on elective abortions, this essay examines all three main types of abortion – therapeutic, elective, and spontaneous abortions, and some of the important legal and clinical issues they might raise for adolescents.

Therapeutic and elective abortions typically are considered together, although they can be deemed considerably different. Therapeutic abortion is the deliberate termination of a pregnancy aimed at preserving the mental or physical health of the mother, preventing the birth of a lethally defective fetus, or reducing the number of fetuses in multiple conceptions to reduce health risks. Thus, an elective abortion is one done for any other reason. Over 90% of abortions occur during the first trimester, either utilizing surgical

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or nonsurgical procedures. Vacuum aspiration may be used during weeks 6–12, and medicinal abortion between weeks 0–9. Surgical options available after the first trimester are dilation and curettage used during 12–15 weeks, and dilation and evacuation is used 15–12 weeks. Dilation and extraction, performed after 21 weeks, is largely illegal in the USA since the passing of the Partial-birth Abortion Ban of 2003, which the Supreme Court upheld in *Gonzales v. Carhart* (2007). The legal foundation of that case is important to consider given that it directly concerns many of the legal and policy issues relating to elective and therapeutic abortions, and those issues directly relate to counseling contexts.

In Carhart, the Court held that the partial-birth abortion ban did not impose an undue burden on the due process right of women to obtain an abortion. The Court did so by noting that the burden was not impermissible as framed under precedents assumed to be controlling, such as the Court's prior decisions in Roe v. Wade (1973) and Planned Parenthood of Southeastern Pennsylvania v. Casey (1992). Roe v. Wade had recognized that a right to privacy under the due process clause in the Fourteenth Amendment to the United States Constitution extends to a woman's decision to have an abortion, but it had noted that the right needed to be balanced against the government's legitimate interests for regulating abortions (protecting prenatal life and protecting the mother's health). Finding that the state's interests grew over the course of the pregnancy, the Court ruled in favor of permitting greater state regulation depending on the trimester of the pregnancy. That approach would be modified later to permit a right to abortion up to the point of viability, which is usually placed at 7 months (28 weeks) but may occur earlier. The Court adopted the viability approach in Planned Parenthood of Southeastern Pennsylvania v. Casey (1992).

In *Planned Parenthood of Southeastern Pennsylvania* v. Casey (1992), a deeply divided Court rendered a plurality opinion that recognized viability as the point at which the state interest in the life of the fetus outweighs the rights of the woman and abortion may be banned entirely except where it is necessary, in appropriate medical judgment, for the preservation of the life or health of the mother. The plurality opinion in *Casey* also crafted the rule that a restriction would be impermissible if it posed an undue burden on women's

rights to seek an abortion, with the undue burden defined as a restriction that had the purpose or effect of placing a substantial obstacle in the path of a woman seeking an abortion of a nonviable fetus. Specifically in this case, the Court used the standard to find impermissible the need for spousal notifications but upheld the use of 24-hour waiting periods, informed consent, and parental consent requirements on the grounds that they did not pose undue burdens. The focus on informed consent was to ensure that women had fuller knowledge of what abortions were and parental consent requirements were efforts to ensure (with some exceptions) that parents were involved in the minor's decision-making. These provisions highlight the tension between a focus on individual rights and a focus on seeking to ensure that individuals make deliberate decisions.

The tension between individual rights and those of others who might have a stake in the abortion decision is worth highlighting in that it is particularly important for adolescents. As noted, the Court in Planned Parenthood of Southeastern Pennsylvania v. Casey (1992) had considered, among other provisions, the parental consent measure of an abortion statute. The statute provided that, except in a medical emergency, the informed consent of at least one parent (or guardian) was required before an unemancipated minor could obtain an abortion. The statute also provided a judicial bypass procedure, if neither parent gave consent, upon a finding that the young woman was sufficiently mature or that an abortion would be in her best interests. The Court ruled that a state may require a minor seeking an abortion to obtain the consent of a parent or guardian, provided that there is an adequate judicial bypass procedure. That approach confirmed what the Court had previously noted, in passing, in prior cases, most notably Bellotti v. Baird (1979). It was in Bellotti that the Court had noted criteria that could make for a constitutional bypass provision. The provision must allow the minor to bypass the consent requirement if she establishes that she is mature enough and well enough informed to make the abortion decision independently, must allow the minor to bypass the consent requirement if she establishes that the abortion would be in her best interests, must ensure the minor's anonymity, and must provide for expeditious bypass procedures. The Court strictly foreclosed parents' absolute right to be consulted about, much less veto, their child's

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decision to abort. This recognition has led the Court to require states to provide access to an alternative decision-maker, such as a judge, when the state imposes parental notice and consent conditions on the minor's abortion decision. This balance serves as a compromise position between according minors the right to make their own decisions concerning the continuation of a pregnancy and according parents or guardians' unchallenged authority to determine whether the pregnancy must be continued to term. But it does recognize that parents can serve important functions in that minors typically lack valuable attributes and resources (such as financial stability, education, and maturity) that an adult would be more likely to bring to a situation of unwanted motherhood. Clearly, whether parents are notified or give consent raises important tensions, and these same tensions emerge in counseling.

Important issues arise in counseling contexts, and they can vary throughout the decision-making process. In therapeutic abortion, individuals must first decide whether to continue with the pregnancy despite the risks. If indeed the pregnancy is wanted and possibly difficult to achieve, efforts are made to address potential feelings of uncertainty, grief, or despair. In these contexts, ethical and religious questions likely arise. In procedures involving elective abortion, pre-abortion counseling seeks to aid in the decision-making process and consideration of reasons and options. Counseling involves considering not only obstacles from their academic, career, and life plans but also responses from families or communities. Adolescent girls likely are in different positions than adults in that they also likely must consider their readiness for parenthood, stunted development, and family discord. In elective abortion contexts, postabortion counseling may not be necessary, as a range of emotions may be present including sadness, anxiety, guilt, regret, but also positive emotions. Counseling most likely is needed in contexts where the adolescent lacks social support, feels coerced in the decision-making, has high ambivalence, or has other preexisting circumstances that can contribute to negative postabortion reactions. For postabortion counseling, no standards have been published; however, women generally are helped to identify emotions and life circumstances impacted by their decision. Psychoeducation may be given regarding new coping skills, and religious aspects may be considered to facilitate personal resolution. Importantly and depending on resolutions, counseling may be provided during the process itself, and it also may be needed later.

Spontaneous abortions, or miscarriages, occur before 27 weeks of pregnancy and result in infant death. While 12-15% of clinically known pregnancies end in miscarriage, many more occur before anyone recognizes the pregnancy, thus increasing the miscarriage rate to an estimated 45-50% of all pregnancies. Risk appears to increase with age, with women ages 20-24 having a 9% chance. Sometimes miscarriages may be physically painful processes, with the negative experiences sometimes compounded by the very private nature of the event. Miscarriage puts individuals at risk for depressive symptoms, major depression, anxiety, obsessive-compulsive disorder, and posttraumaticstress disorder (Klier et al. 2002; Geller et al. 2004). Some women may be concerned about immediate medical issues and underlying factors for the miscarriage. Here, post-loss counseling aims to validate death and normalize feelings of grief. Symptom reduction, grief management, utilization of coping resources, and psychosocial factors also may be addressed. Research in this area has not centered on the needs of adolescents. although adolescents' status and developmental needs may raise distinct issues.

Whether intentional or unintentional, abortion remains prevalent. It necessarily involves numerous complex and difficult issues. Those issues are likely even more complex when dealing with adolescents. In addition to dealing with psychological, moral, and social considerations, this area of adolescents' experiences also involves complex laws that raise important issues and try to balance many rights and responsibilities. Despite those complexities and perhaps because of intense controversies, research relevant to adolescents has been sporadic and much of the research in this area, including writings that focus on clinical issues, tends not to focus on adolescents' particular needs (see Coleman 2006; Levesque 2000).

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Abortion Rights

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One of the most important issues facing adolescents involves the extent to which their right to privacy will be respected, and that right is implicated in a broad variety of potential contexts and circumstances. In the United States, a key area where this issue has been litigated has been in the context of abortion. This context is of significance in and of itself as well as for demonstrating how the legal system approaches the rights of adolescents. As a result, Bellotti v. Baird (1979), the leading Supreme Court case dealing with adolescents' rights to access abortions without the involvement of their parents, is one of the most important United States Supreme Court decisions dealing with the adolescent period. The case and this area of law address the fundamental issue of the extent to which adolescents can have rights of their own and, equally importantly, the extent to which they can control the exercise of those rights.

Bellotti involved a Massachusetts law requiring parents to consent for minors who were seeking abortions.

The law had provided that if one or both parents of the minor refuse consent, the minor could obtain a judicial order permitting the abortion if they were able to show good cause. On appeal to the United States Supreme Court, the Justices were unable to agree on a single opinion that would announce the rule and reasoning for its decision, but eight members of the Court agreed that the Massachusetts statute violated the United States Constitution. The law, according to the Supreme Court, violated the independent rights of minors to seek and obtain abortions. Among other findings, the Court required states to respect mature minors' rights to exercise their right to access abortions and, by doing so, recognized minors' own rights without requiring parental involvement. That general rule is worth exploring in greater detail as it has important consequences for protecting the rights of adolescents, especially those rights that would be deemed fundamental and highly protected if they were adults.

The case had multiple opinions that focused on different aspects of adolescents' rights. One of the opinions (by four members of the Court) provided the key ruling in the case. The opinion reasoned that states need not require parental involvement in adolescents' decisions regarding abortions. However, if they do seek to require a pregnant minor to obtain one or both parents' consent to an abortion, they also must provide an alternative procedure for obtaining authorization for the abortion. Alternative procedures must allow a pregnant minor the opportunity to show either (1) that she is mature enough and well enough informed to make her abortion decision, in consultation with her physician, independently of her parents' wishes, or (2) that even if she is not able to make the decision independently, the abortion desired would be in her best interests. The state also must ensure that such proceedings assure that a resolution of the issue, and any appeals that might follow, will be completed with anonymity and with sufficient expedition to provide an effective opportunity for an abortion to be performed. Following that reasoning, the Court held that the Massachusetts statute unduly burdened the constitutional right to seek an abortion because it permitted the withholding of judicial authorization for an abortion for a minor found to be mature and fully competent to decide to have an abortion; it was also unconstitutional because it required parental

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consultation or notification in every instance, without affording a pregnant minor an opportunity to receive an independent judicial determination that she is mature enough to consent to an abortion or that an abortion would be in her best interests.

The case also had an important concurring opinion and a strong dissent. A concurring opinion (also by four members of the Court) expressed the view that a pregnant minor's right to make the abortion decision may not be conditioned on the consent of one parent, especially given the Court's earlier decisions holding that a woman's right to decide whether to terminate a pregnancy is entitled to constitutional protection. Given that reasoning, the statute was unconstitutional because under it no minor, no matter how mature and capable of informed decisionmaking, might receive an abortion without the consent of either both of her parents or a judge, there thus being, in every instance, an absolute third-party veto to which a minor's decision to have an abortion was subject. A dissenting opinion expressed the view that the statute was not unconstitutional in requiring parental consent when an unmarried woman under 18 years of age seeks an abortion.

In addition to being important for this area of jurisprudence, as noted above, the case was important for what it highlighted about the rights of minors. The Court emphasized that minors are not beyond the protection of the Constitution. The Court noted that the legal system typically favors the rights of parents to raise their children as they see fit, it did so by highlighting three fundamental rationales for justifying the conclusion that the constitutional rights of children cannot be equated with those of adults: the peculiar vulnerability of children; their inability to make critical decisions in an informed, mature manner; and the importance of the parental role in child rearing. By supporting the power of parents to control the rights of adolescents under those conditions, the Court also laid the groundwork for the opposite. That is, when dealing with fundamental rights, adolescents are increasingly given control over those rights if they can show that they are not peculiarly vulnerable, can make informed and mature decisions, and the parents' role is attenuated in the matter. If these conditions are met, then adolescents are more likely to be able to control their own rights or states are more likely to provide mechanisms for them to demonstrate that they should

be able to exercise their rights. The legitimacy of this approach was confirmed in this case's approval of the "judicial bypass" provision – the stipulation that states must provide minors with an opportunity to demonstrate that they are mature enough to not engage their parents and can make their own decisions or, in the alternative, another decision maker can decide what course of action should be taken if the minor is not mature enough.

The case is of significance for recognizing the rights of minors to control some very important decisions, as it arguably includes the right to privacy on which abortion decisions are made. But the case actually is considerably limiting (see Levesque 2000). For example, in practice, the judicial bypasses have tended to be unnecessary since adolescents tend to be quite mature if they can figure out that they can seek a judicial bypass and, as it turns out, most are found mature by judges. Also in practice, especially as it relates to abortions, the need for appearances in court results in delays and other obstacles which, in theory, should be avoided due to the urgencies involved and, as many have argued, since the use of the judicial bypass brings little of value to the minors or their families. Despite these and other criticisms, the bypass requirements are likely to continue given that they do provide a balance between the rights of parents and those of their children and they do, in many ways, help reinforce parental rights, which remains the dominant standard. In fact, the focus on judicial bypasses was what allowed the Supreme Court to permit laws requiring parental notification that minors were seeking abortions (see Hodgson v. Minnesota 1990). The provision of alternatives means that the major rule, the rights of parents, remains, which is something of considerable significance given that it is not clear whether and how adolescents will know of alternatives and thus avail themselves of them.

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► Abortion Counseling

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Abstinence

Abstention

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Abstention refers to a deliberate act of self-denial. The period of adolescence involves considerable abstention, especially in the form of social and legal efforts to encourage adolescents to abstain from engaging in numerous types of behaviors. Included among the most frequent behaviors that adolescents abstain from are smoking (Jacobsen et al. 2005), consuming alcohol and illicit drugs (Rosenberg et al. 2008), engaging in sexual activity (Loewenson et al. 2004), as well as general delinquency (Boutwell and Beaver 2008). Our society has developed and continues to support numerous institutions that help adolescents abstain and that even can use the force of law to have adolescents abstain from activities deemed problematic. Illustrative of these efforts are the juvenile and criminal justice systems, schools, health-care institutions, as well as families. These institutions also embrace efforts to help adolescents abstain from more socially acceptable and legally permissible activities, such as using potentially harmful products like caffeine (Oberstar et al. 2002), sugared products (French et al. 2003), and even the media (Levesque 2007). Given the recognition of the need to prevent negative health and its associated outcomes, the period of adolescence always has been a period that has attracted considerable efforts to foster habits that would result in having adolescents abstain from an ever-increasing amount of activities deemed potentially problematic. These efforts always have attracted considerable controversy, as evidenced most strikingly in abstinence-based sexuality education (Levesque 2000), since they go to the heart of what it means to be an adolescent: someone who is considered to be in transition and who needs special supports to transition through a period that likely will have an important impact on their later development.

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- ► Abstinence
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Abstinence

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Overview

The majority of teenagers in the USA begin their adolescence in a state of sexual abstinence and end it sexually active. These before and after points are known, but there is much about adolescents' abstinence behavior and meaning-making that is not. This essay summarizes the state of scientific and scholarly knowledge about abstinence in the lives of teenagers. It places abstinence in its social and political context, discusses various definitions of abstinence, examines research on the goals of abstinence and whether it achieves them, and considers potential benefits and harms of abstinence to adolescents, while highlighting gaps in knowledge and areas of controversy.

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The majority of teenagers in the USA begin their adolescence in a state of sexual abstinence and end it sexually active. While fewer than one in eight 15 year olds have ever had sex, 70% of 19 year olds have had vaginal sexual intercourse (Abma et al. 2004). Though these before and after points are known, there is much about adolescents' abstinence behavior and meaningmaking that is not. This essay will summarize what is known about abstinence in the lives of teenagers while highlighting gaps in knowledge and areas of controversy.

The Social and Political Context of Abstinence

Any consideration of abstinence among US adolescents must be situated within the socio-political context of abstinence-only education. Unlike other wealthy, industrialized democracies, for the past few decades, the USA has emphasized sexuality education programs for teenagers that instruct adolescents to abstain from sex until they are married or to become "secondary virgins" by ceasing sexual activity until marriage. This federal policy, only very recently ended, has brought the concept of abstinence to prominence among those who study and provide care for adolescents, but has left it ill-defined and not well understood.

Abstinence is most often studied in the context of research into sexual behavior, cognitions, and emotions. This context has had several effects upon the populations generally studied. It can be difficult to obtain parental consent, institutional approval, and funding for the study of sexuality-related phenomena among young adolescents, unless these adolescents are members of a group seen as particularly vulnerable to negative sexual outcomes such as teen pregnancy or sexually transmitted infections (STIs). Thus, the majority of studies that investigate abstinence either work with older, easier to reach adolescents such as college students, or they focus on these "at-risk" groups, especially African-American teenagers and girls. Two important exceptions are data on abstinence and sexual behavior from the National Longitudinal Study of Adolescent Health, a nationally representative study of seventh- to twelfth-graders that began in 1995, and data from a nationally representative sample of adults reporting on their adolescent experiences in the National Sexual Health Survey, carried out in 1995-1996.

What is Abstinence?

Clinicians, educators, and parents often assume that adolescents regard "having sex" and "being abstinent" as opposites. In fact, research suggests that youths' understanding of these constructs is more complex. There is a solid consensus across studies of how adolescents define abstinence that vaginal intercourse "counts" as having sex, and that avoiding all erotic contact, even kissing, constitutes abstinence. However, much less agreement is found about behaviors such as mutual masturbation, oral sex, and anal sex. Some adolescents define these acts as sex, while others, possibly working from an "anything but vaginal intercourse" point of view, define them as abstinence (Byers et al. 2009).

The appropriate role of abstinence in youths' lives is another topic on which adolescents' perspectives may diverge from those of some adults. Many adolescents report thinking of abstinence as a way of protecting themselves against the potentially negative social and physical consequences of sex. Others report viewing the practice of abstinence as a moral or religious choice. However, most youth also see abstinence as a developmental stage rather than a steady state, and perceive it as part of the trajectory that eventually leads to partnered sexual activity (Ott et al. 2006). In this conceptualization, adolescents who have stepped onto the "sexual escalator" start at abstinence and move toward sex (Masters et al. 2008).

Abstinence may be consciously chosen by some teenagers as a values-driven practice, as a sexual risk reduction method, or as a combination of both. This notion of abstinence applies to youth who have opportunities to engage in partnered sexual behavior but chose not to do so. However, research suggests that many teenagers, both those who have already experienced first intercourse and those who have not, simply lack frequent sexual opportunities. They may not have a sexual partner, or having a willing partner, may not have the privacy, space, or time for sex. These youths' behavior - not having sex - may appear from the outside to be identical to that of youth who are abstinent on purpose, but the behavior's meaning to them, and its role in their sexual and relational development, is likely to be very different.

These definitional issues are of both practical and conceptual interest to those who work with youth. Practically, adolescents who view their behavior (e.g., oral sex) as abstinent rather than as sexual may be less

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measured with biomarkers, did not differ between young adults who had taken abstinence pledges as adolescents and those who had not (Bruckner and Bearman 2005). Both of these findings suggest the relative ineffectiveness of abstinence, as practiced in

likely to practice sexual risk reduction, thus increasing their risk of STIs. Attempts to be abstinent according to the "anything but vaginal intercourse" definition apparently held by some teenagers may paradoxically lead to even higher risk sexual behavior, such as the anecdotal reports of young women substituting anal sex, with its attendant higher risk of HIV transmission, for vaginal sex as a method of "virginity preservation." Conceptually, researchers and clinicians attempting to assess adolescents' abstinence practices may need to be more behaviorally explicit about how they ask their questions, rather than assuming a shared definition of abstinence. Attention to why adolescents are abstinent also seems warranted: There are likely to be important differences between the abstinence of an 18-year-old Catholic girl who is saving intercourse for marriage and that of a 15-year-old boy from a secular family who also has never had partnered sex, but who aspires to do so at the earliest opportunity.

Does Abstinence "Work"?

Abstinence is sometimes described as being 100% effective in preventing pregnancy and STIs. However, if abstinence is considered as a contraceptive or STI prevention method rather than as a values-governed practice, it has, like all such methods, a failure rate. This failure rate is the difference between perfect use (abstaining from sex at every sexual opportunity) and typical use (intending to be abstinent, but not having 100% success doing so). Prevention methods such as condoms are susceptible to both user failure and method failure; all abstinence failure, clearly, is user failure.

Very little research investigating the failure rate of abstinence as a contraceptive or STI preventative has been done. Mathematical modeling based on the assumption that typical abstinence use is less than 100% demonstrates that partial abstinence (infrequent sex) provides some protection against infections with a low per-act probability of transmission, such as HIV. However, for those infections with a high per-act probability of transmission, such as syphilis and Chlamydia, and for pregnancy, abstinence needs to be nearly perfect to reduce risk effectively (Pinkerton 2001). A study using nationally representative data examined the effectiveness of virginity pledges (public statements of commitment to abstinence until marriage) in reducing STI rates among young adults. Rates of STI, as

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real life, at preventing most STIs and pregnancy.

Abstinence until marriage, the average age of which now 27 for men and 25 for women – is older with each generation, seems increasingly unlikely for most adolescents (Finer 2007). Nonetheless, some abstinence advocates assert that premarital sex is inherently dangerous to teenagers, likely to result in physical and psychological harm. Any given sex act may indeed result in a negative physical, social, or emotional outcome such as contracting an STI, becoming unintentionally pregnant, being teased or stigmatized by peers, or wounded feelings. However, research suggests that whether people's initial sexual experiences occur before marriage does not affect their long-term physical or emotional health. Rather, the context in which an adolescent begins to have partnered sex is the more critical factor: If the experience is pre-pubertal, incestuous, forced, or coerced, then this is likely to affect later functioning; otherwise, premarital sex is not associated with negative health outcomes in adulthood (Else-Quest et al. 2005). Another study using nationally representative data classified ages at first intercourse as early (lowest quartile, mean age 14), normative (middle two quartiles, mean age 17), or late (highest quartile, mean age 22) based on adults' reports of their adolescent experiences. Both early and late sexual initiations were associated with problems in sexual functioning, especially among men. Initiation before marriage, but within normative age ranges, was not associated with sexual difficulties or general ill-health (Sandfort et al. 2008).

Other research suggests that not only may abstinence, in some situations, offer little benefit to youth, it may also have its own potentially harmful effects. Teenagers' identification of themselves as people committed to abstinence may keep them from considering situations in which they might someday choose to engage in sexual behavior and from learning how they might then protect themselves against unwanted pregnancy and STIs. Uncritical endorsement of abstinence as the only appropriate choice for adolescents is often linked with a view of sexual behavior that minimizes the role

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of personal choice and agency in making sexual decisions, particularly for young women (Tolman 2002). "Virginity pledging" is associated with a reduced likelihood of contraceptive or condom use at first intercourse (Bearman and Bruckner 2001).

Abstinence advocacy by educators, policy makers, and health care providers can also cause social harm to the adolescents it excludes. Such discussions rarely acknowledge the experience of sexual minority adolescents. This lack can be attributed to the influence of teen pregnancy and out-of-wedlock birth prevention goals on contemporary thinking about abstinence; conceptualizations of abstinence that frame it as a way to avoid "illegitimate" births will naturally tend to be hetero-centric. One of the tenets of the pro-abstinence movement in the USA is that a monogamous married relationship is the standard of human sexual activity. Since gay men and lesbians cannot legally marry in the majority of states, sexual minority teens are left with no guidance on how to make an informed, values-driven decision about whether or when to begin partnered sexual activity. This exclusion can contribute to the marginalization of an already vulnerable group of adolescents.

For some adolescents, in some situations, abstinence can be a very positive choice. Most youth will experience an abstinent period during which they are riding the "sexual escalator" but do not yet feel ready for intercourse. They may experiment with physical intimacy and participate in relationships that include noncoital sexual behavior during this period. Some youth will be members of communities with a moral or religious framework that values abstinence until marriage, and choosing to enact this value consistently in their own lives may be a practice of empowerment, safety, and integrity for them. However, youth with different ethical frameworks may initiate partnered sex outside of marriage, and it is equally possible for them to take this action with empowerment, safety, and integrity.

Adolescents have many choices for safe, healthy, ethical expression of their sexuality, including the choice of abstinence. Teenagers who are informed of these options by adults, and taught skills both for refusing unwanted sex and for negotiating wanted sex, sexual safety, and pregnancy prevention, will be more likely to traverse their adolescence successfully and establish fulfilling adult relationships.

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► Sexuality Education

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Abstinence Education

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Overview

"Abstinence education" (also known as abstinence-only, abstinence-plus, or abstinence-only-until-marriage

education) has, in recent years, become a specialized label, a technical term employed by educators, politicians, youth advocates, and public health workers in the USA. The label identifies a particular moral and educational agenda shaping what has been taught about human sexuality within USA public schools, since the 1980s. Approaches to teaching sexuality that lack the characteristics of this particular agenda (described in more detail, below) are titled, in turn, "comprehensive sexuality education." Labeling or branding these educational efforts has facilitated their polarization, their validation as entrepreneurial efforts, and their entanglement in an ongoing, bitter dispute over the best strategies to teach children and adolescents about sexual health.

This brief essay – far from an exhaustive account of the issue – reviews the polemics surrounding abstinence education, summarizes abstinence education's history in the USA, and reflects on the role sexual abstinence plays in adolescent development. In each of these segments, readers will find the views of abstinence education proponents presented alongside the perspectives of its critics. As abstinence education and comprehensive sexuality education have coexisted within US public schools, the juxtaposition presented here is intentional because it highlights the complex dynamics and "subtle dance" between two distinct sexuality education paradigms.

It is important to bear in mind that abstinence education is not unique to the USA, however. Uganda, for instance, has promoted a public health campaign to prevent the spread of HIV/AIDS based on the "ABC" approach ("abstain, be faithful, condomise"; see http://www.avert.org/abc-hiv.htm for details on the variations on the ABC definition). Nevertheless, many of the abstinence education initiatives being implemented in various countries have their philosophical and methodological origins in the USA movement. Due to space constraints, this essay will focus exclusively on abstinence education efforts in the USA.

Abstinence Education or Comprehensive Sexuality Education?

Participants on both sides of the issue tend to agree on a basic, bare-bones definition of abstinence education: Abstinence education directs children and adolescents to deliberately and voluntarily avoid "having sex" (specifically, to avoid penile–vaginal intercourse) until they are married, in order to prevent an unintended pregnancy or various sexually transmitted infections (or STIs). Such restraint is viewed as the healthiest way of circumventing the undesirable consequences associated with certain sexual behaviors, and maintaining the sexual health of children and adolescents. While proponents and critics of abstinence education tend to agree on this basic definition, however, they differ significantly regarding the scope and methods for teaching abstinence in a developmentally appropriate manner. Some of the questions fiercely debated by friends and foes include, for example, "Abstinence from *which* behaviors, specifically, should be taught?" And, "Should information about sexual anatomy and physiology also be presented?"

When evaluating a particular type of abstinence education - programs funded by Title V in Texas between the years 2000 and 2005 (see description of Title V funding, below) – the authors of this essay and their evaluation team quickly learned that programs' definitions of abstinence (and, by extension, of abstinence education) were surprisingly more nuanced and complex than the bare-bones definition presented above. The team learned that abstinence consisted of not only avoiding sexual activity (however sexual activity was defined), but also adopting or assimilating a series of behaviors, intentions, and attitudes, pertinent to an "abstinent-life-style." In other words, to be considered truly "abstinent" by abstinence education proponents, adolescents should also adopt a positive view of sexless relationships, of their own academic/ professional future, and of themselves as worthy human beings (i.e., possess high levels ▶ self-esteem). Alongside this repertoire of attitudes, "truly abstinent teens" should also avoid many noncoital sexual behaviors (in some instances, even hand-holding) and other practices such as becoming friends with peers who are sexually active, using/abusing alcohol and drugs, and consuming media with sexual content (pornography, erotic movies, rap lyrics). For a detailed study of the nuances associated with various definitions of abstinence, see Goodson et al. 2003. For a discussion of what constitutes abstinence. from the perspective of one abstinence education program funded by Title V, see Mann et al. 2000.

Motivated by such an idiosyncratic and multifactorial definition of abstinence, programs anchor their pedagogy in the teaching of virtues such as honesty,

integrity, and loyalty. Abstinence education curricula also place a strong emphasis on influencing/shaping individual-level psychological factors such as perceptions of social norms and, ultimately, self-esteem. Little (and sometimes no) emphasis is placed on teaching about healthy sexuality in its various dimensions (relationships, sexual communication, sexual identity, sexual anatomy, physiology, reproduction, contraception, infection prevention).

In contrast, comprehensive sexuality education is less directive and places stronger emphasis on teaching about all the dimensions of sexual health, including abstinence, using developmentally appropriate strategies. Those who support comprehensive sexuality education do so grounded in the assumption that knowledge is power, and withholding information from youth (information that could, potentially, save their lives and protect their health) is nothing short of unethical and tantamount to educational misconduct. Comprehensive sexuality education, therefore, proposes that youth should have access to all available knowledge about human sexuality, in ways that are appropriate for their age. While such knowledge includes information about sexual anatomy, physiology, and protection from diseases or unwanted pregnancies, abstinence from risky sexual behavior is equally an essential element of this knowledge-base.

This assumption - that information imparted in developmentally appropriate ways is empowering and ethical - has led one of the major organizations involved in promoting comprehensive sexuality education in the USA - the Sexuality Information and Education Council of the United States (SIECUS) – to propose a set of guidelines for educators teaching sexual health to various age groups. These recommendations can be found in the publication Guidelines for Comprehensive Sexuality Education: Kindergarten -12th Grade (National Guidelines Task Force 2004). The document, now in its third edition, was heralded as a significant "breakthrough in sexuality education" at the time it was released and to this day remains an important resource for comprehensive sexuality educators.

Despite the emphasis on teaching all dimensions of sexual health, comprehensive sexuality education has consistently highlighted the message that abstinence from intercourse is the healthiest form of "sexually being in the world" for all children and most

adolescents. As in the case of abstinence education, comprehensive sexuality education views the teaching of sexual abstinence as healthy and desirable. Comprehensive sexuality education's dispute with abstinence education centers, however, in abstinence education's *approaches* (not providing information about the various aspects of sexual health), its *assumptions* (that teaching abstinence from sex *and* teaching ways to protect oneself provide youth with mixed, ambiguous messages), and the socially conservative and promarriage *agendas* being championed through these programs (for instance, the promotion of marriage as the only acceptable venue for sexual relationships).

To better understand comprehensive sexuality education's various concerns, it is important to learn about the legislative efforts put in place to support both comprehensive sexuality and abstinence education programs in the USA, in recent decades. The section below provides a brief outline of these laws.

Brief History of Legislation Efforts Supporting Comprehensive Sexuality and Abstinence Education in the USA

Attempts to educate USA children and adolescents in the public school system about health and sexuality enjoy a lengthy, yet conflicted, history. Prior to the 1980s, schools focused on providing students basic information about puberty and personal hygiene, obedient to the charge of forming healthy and productive citizens.

In the early 1980s, conservative groups (led by political and religious leaders) initiated focused and systematic efforts to influence the teaching of sexuality education in public schools. These efforts hinged on, and were nourished by, the argument that the thenavailable approach to sexuality education (comprehensive) had been ineffective in halting the epidemics of unplanned teenage pregnancies and STIs in the USA. Comprehensive sexuality education had achieved little, if anything, in terms of prevention, and was deemed a "miserable failure" by these conservative groups. According to abstinence advocates, what was needed was a different modus operandi, a different worldview for teaching adolescents about healthy sexuality: an approach that went beyond merely minimizing risk behaviors and emphasized eliminating sexual risks, altogether. Abstinence education was proposed, therefore, as a "much-needed" variant of school-based

sexuality education or as an *alternative* approach to comprehensive sexuality education. Many proponents viewed it as the *only alternative*, however, and claimed abstinence education should replace *all* comprehensive sexuality education (Mann et al. 2000).

This latter point-of-view hinged on the belief that comprehensive sexuality education, besides having proven ineffective for prevention, bore the potential, in fact, to harm adolescents. Defenders of abstinence education claimed (then and now) that comprehensive approaches send teenagers an ambiguous message: the message that youth can (and should) choose to abstain from all forms of risky sexual behaviors yet, in circumstances where they cannot, they should protect themselves from unintended consequences. This "ambiguous message" communicates the notion that abstinence is, indeed, too difficult a choice, and there are other ways to negotiate sexual relationships (Mann et al. 2000). According to abstinence education proponents, this apparent contradiction generates too much uncertainty for children and adolescents regarding their sexual decision-making and should not be taught as a healthy option. In an effort to purge this ambiguity from the school-based sexuality education available then, religious and politically conservative groups began (in the 1980s) to effectively advocate for federal funding of abstinence-only education, in which the message regarding abstinence from coital activity would be strengthened, and the information about protection from pregnancy and STIs would be weakened.

Below is a brief outline of the main legislative efforts put forth in the last 4 decades to support comprehensive sexuality and abstinence education. It is important to bear in mind that, while attempts to promote abstinence were in place as early as the 1980s, it was the 1996 legislation that represented a major shift in the history of school-based sexuality education. The 1996 legislation has had, thus far, the most significant impact on the teaching of sexuality education in US public schools. It stands out as a unique innovation in the realm of morality politics and government oversight of the content taught in health and sexuality education classes. (To better understand *why* the 1996 legislation represents an innovation in public policy and sexuality education, see Doan and Williams 2008.)

1970 – Family Planning Services and Population Research Act (PL 91–572). The Act established the

Office of Population Affairs in the Department of Health, Education, and Welfare. Title X funds were allocated for "family planning services, training, information, and education programs" (Doan and Williams 2008, p. 26).

1978 – Adolescent Health Services and Pregnancy Prevention Care Act. Spearheaded by Senator Edward Kennedy (D-MA), "this act intended to reduce teen pregnancy by increasing access to federally funded contraception and abortion services" (Doan and Williams 2008, p. 26).

1981 – Adolescent Family Life Act (AFLA; PL 97–35). This represented the first "federally funded, and sanctioned, sex education legislation" (Doan and Williams 2008, p. 28). Generated in response to pressure from conservative Christians, it was included in the Omnibus Budget Reconciliation Act of 1981 – "signed into law as Title XX of the Public Health Service Act" (Doan and Williams 2008, p. 28). Title XX funded many initiatives emphasizing "abstinence and adoption as an alternative to abortion" and, therefore, opened wide the doors for funding focused exclusively on abstinence-only-until-marriage education in 1996 (Doan and Williams 2008, p. 28).

1996 – Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA). This was a welfare reform omnibus bill. According to Doan and Williams (2008), "omnibus legislation refers to the practice of packaging numerous, disparate policy issues into one massive bill" (p. 15) whose details often get approved without discussion. Thus, absent any public or Congressional debate (similar to the creation of Title XX in 1981), \$50 million of federal funding were allocated, annually, for abstinence-only-until-marriage programs. Title V funding, then, became available for "educational or motivational" programs willing to comply with eight well-defined parameters for the teaching of abstinence (known as the "A-through-H Definition" – see Glossary for definition).

2000/2001 — Special Projects of Regional and National Significance — Community-Based Abstinence Education (SPRANS-CBAE). This was an abstinence program advocated by the George W. Bush administration that "bypasse[d] state intervention by providing [federal government] money directly to community organizations, including faith-based organizations" (Doan and Williams 2008, p. 41). Recipients of these funds had to comply with the requirements

spelled out in Title V (described above), including abiding by the "A-through-H Definition." SPRANS-CBAE programs were required to shift from a focus on *reducing risky behavior* to one *promoting preparation for marriage* (Doan and Williams 2008, p. 32). Between 2001 and 2006, funding for CBAE increased over 450% (SIECUS 2008). According to Advocates for Youth, "from 1998 to 2003, almost *a half a billion dollars* in state and federal funds were appropriated to support the Title V initiative" (Hauser 2008).

2007 – Legislation passed by Congress requiring abstinence education programs funded by Title V comply with all of the eight characteristics of the "A-through-H Definition." In addition to the compliance mandate, states were now required to provide assurances that funded curricula and materials "meaningfully represent[ed] each element of the definition" (SIECUS 2008).

2009 – End to Reauthorization of Title V funding. Funding for the Family Life Act remained stable, but significant cuts were made to CBAE's budget for fiscal year 2009.

2009 - Baucus Amendment (The Personal Responsibility Education for Adulthood Training) and Hatch Amendment (Abstinence-Only-Until-Marriage Education). Both amendments were approved by the Senate Finance Committee on September 29, 2009. The Baucus Amendment proposed to fund comprehensive sexuality education, with \$75 million allotted to evidence-based programs and \$25 million, to "innovative programs as well as research and evaluation" (SIECUS 2009). The Hatch Amendment proposed to reinstate Title V funding for abstinence education. Both amendments are part of the Patient Affordable Care Act (also known as the "Healthcare Reform Bill" - H.R. 3590) that will be voted by the US House and Senate, in the near future. At the time of this writing, the US House of Representatives had voted in favor of the Act, and the Senate had approved a motion to move forward with discussion (consideration) of the Act.

Although extensive, the list above does not tell a complete story: it fails to reflect many other streams of funding (from both federal and state monies) that have supported abstinence education. Specifically, the list does not include support being provided through earmarked grants awarded to certain states and to specific organizations (SIECUS 2008). Moreover, according to a recent SIECUS report: "Abstinence-only-until-marriage providers are also receiving

funds through traditional HIV/AIDS and STD [sexually transmitted diseases] prevention accounts such as those administered by HHS and the Centers for Disease Control and Prevention (CDC)" (SIECUS 2008).

Finally, it is important to note that, in addition to all government-generated support, abstinence education initiatives have spawned a multimillion-dollar business in the USA, centered on nonprofit organizations and curriculum developers. Examples include organizations such as "Aim for Success" (www. aimforsuccess.org) and curricula such as "Worth the Wait," sponsored by a healthcare agency (www. worththewait.org). Therefore, even if Title V and other major abstinence education initiatives become defunded through legislative acts during President Obama's administration (2009 onward), the impact this might have on the abstinence education agenda in the USA remains unknown.

Evaluations of Abstinence Education Initiatives

In July 2009, the CDC reported data from the National Vital Statistics System in the USA focusing on the sexual and reproductive health of persons aged 10-24 years. The data were collected over a 5-year period, 2002-2007 (Centers for Disease Control and Prevention 2009). The report concluded that after a significant decline between 1991 and 2005, birth rates as well as syphilis infection among teenagers 15-19 years old increased between the years 2005 and 2007 (Centers for Disease Control and Prevention 2009, p. 02). When the initial declines were documented, abstinence education advocates were quick to claim the credit for these statistical improvements. As the rates began to increase, however, critics readily pointed to the ineffectiveness of abstinence education programming as the main culprit.

While documentation of abstinence education programs' successes or failures was scarce prior to the Title V authorization in 1996, evaluations of these programs and concomitant publication of evaluation reports have grown exponentially, since then. A few states that received Title V funding, for instance, opted to carry out an independent evaluation of their initiatives (perhaps instigated by the requirement that states provide a substantial amount of matching funds of their own, to support these programs). Texas was

one of the states putting in place a multiyear, multiphase evaluation (carried out by an evaluation team that included the authors of this essay). Other states conducting their own evaluations during the first 5 years of Title V funding included Maryland, Missouri, Nebraska, Arizona, Florida, Oregon, Washington, Iowa, Pennsylvania, and California (who ceased to receive Title V funding after its evaluation revealed the programs were not effective) (Hauser 2008). The only attempt to evaluate Title V, *nationwide*, was implemented by the research/evaluation firm, Mathematica Inc. (Trenholm et al. 2007).

Findings from all of these evaluations have been mixed and non-convincing: state-level evaluations as well as Mathematica national data suggest abstinence education programs fail to foster, among participants, both the intention and the practice of waiting to have sex until marriage. Findings do suggest, however, that in terms of changing youth's attitudes toward abstinence ("It's 'cool' to be abstinent!"), improving their perceptions of the social norms regarding sexual activity among teens ("People around me think abstinence is best for me ..."), and increasing their awareness of the benefits of postponing sexual relationships, the programs have experienced some measure of success. The programs have failed, however, in helping teens "translate" this awareness, these attitudes and these beliefs into actual intentions, motivations, and behaviors (Guide to Community Preventive Services 2009).

Evaluations of abstinence education have failed to demonstrate strong and long-term, sustainable indicators of program effectiveness, but the reasons for such failure are multiple and complex. Most of the evaluations, themselves, have failed to employ rigorous experimental or quasi-experimental designs (for various, often valid reasons), limiting confidence in the findings (United States Government Accountability Office 2006). According to a report evaluating abstinence education interventions to prevent HIV/AIDS, other STIs, and pregnancy, released by the Task Force on Community Preventive Services at the CDC, "there is insufficient evidence to determine the effectiveness of group-based abstinence education ... evidence was considered insufficient due to inconsistent results across studies" (Guide to Community Preventive Services 2009). Unquestionably, reasons for lack of effectiveness also lie within the programs. For example, most evaluated programs revealed a conspicuous

absence of sound theoretical grounding. Only 2 of the 32 programs evaluated in Texas proposed to develop their curricula based on well-tested health behavior or youth development theories (Goodson et al. 2006b).

According to the Texas and the Mathematica evaluations, programs had, instead, an implicit, unstated theory-of-action (or causal explanations for why certain activities in the program might promote abstinent behavior among participants). Remarkably, these theories-of-action, more often than not, mirrored the wisdom available in the scientific literature, and targeted variables correlated with teens' sexual behavior. Nonetheless, when it came to delivering the programs, lesson plans frequently placed too much emphasis on factors only *minimally* associated with behaviors and intentions.

A telling example of this misplaced focus has been the forceful messages targeting adolescents' self-esteem. The logic behind the messages: higher self-esteem will lead to more confident and healthier choices, thus fostering avoidance from risky behaviors. While selfesteem has been found, at times, to be correlated with sexual attitudes, intentions, and behaviors among youth, the quality of the evidence is questionable, the strength of the association is modest, at best, and at times the relationship between self-esteem and sexual behavior has been inverse (i.e., higher levels of selfesteem are associated with lower levels of preventive/ protective behaviors; for a systematic review of this issue, see Goodson et al. 2006a). Empirical evidence does not support the disproportionate importance abstinence education programs have placed on the self-esteem factor; therefore, despite an internal logic that echoes scientific findings, abstinence education programs tend to - in practice - "overdo" certain factors and ignore others, thus transforming their efforts into a-theoretical interventions with diminished probabilities of success (Goodson 2010).

Continued evaluations of abstinence education programs will remain an important area of study, even if these programs find themselves stripped of federal funding in the future: the question of how to teach human sexuality with emphasis on abstinence from risky sexual activity, in developmentally appropriate manners, remains a valid and pedagogically important question. Only since the advent of federally funded abstinence education initiatives have sexuality educators begun to pay any serious attention to the question.

18 Abstinence Education

Abstinence Education: Its Role in Adolescent Development

Despite the political and pedagogical controversies surrounding the teaching of abstinence, as they have played themselves out in the history of sexuality education in the USA, does abstinence education have a role to play in the healthy development of children and adolescents? The answer to this question is quite simple: While abstinence education as an ideological agenda may have proven less than helpful to American teenagers given these programs' inability to affect youth sexual behavior, the notion of abstaining from practices that may pose health and social risks for adolescents is, undoubtedly, valid, and valuable.

Abstinence from sexual/coital behavior during childhood and adolescence is the healthiest and ideal practice for youth and - as an ideal construct - finds support at many levels of arguments: for children and adolescents it makes sense to avoid sexual intercourse, based on biological, psychological, social, economic, legal, and spiritual arguments. Because children's and adolescents' bodies, sexual organs, sexual physiology, and emotional make-up lack maturity, they are considerably more vulnerable to diseases, infections, and emotional traumas with lasting consequences (sometimes life-long effects, such as in the case of infertility caused by Chlamydia infection, or infection with the cancer-causing strain of the ▶ Human Papillomavirus (HPV) and HPV Vaccines). From a psychological perspective, adolescents do not have the cognitive and emotional maturity to make wise decisions regarding personal relationships that might impact their futures. From a social interaction perspective, choices to couple with certain partners have important implications for teens' existing social networks, either exposing them to risk-prone environments (where they may engage in other risky behaviors such as alcohol consumption or drug use), or destroying extant supportive networks. Economically, because adolescents are, mainly, consumers and not producers in a capitalist economy, they are not equipped to face the financial challenges posed by an unplanned pregnancy, and the consequences associated with raising an unexpected child. Legally, sexual relationships with minors are against the law in the USA, a notion that often seems neglected, only to be resurrected when a "case" happens, a couple is "caught," and the justice system is invoked. Lastly, the spiritual lives of adolescents can become seriously

affected by premature sexual relationships, leading to existential angst, doubt, and uncertainty. Because sexual relationships do not occur in a vacuum but are, instead, embedded in people's set of values, beliefs, and commitments, the potential ramifications for youth's spiritual lives, of engaging early in a sexual relationship (or more than one) can lead to cognitive dissonance, lack of healthy attachments, and personal distress.

While the notion of abstinence from risky sexual activity can be defended on many grounds as the ideal for children and adolescents, it is important to remember that youth (worldwide) inhabit an imperfect world and live nonideal lives. Granted, many teenagers engage in sexual activity without experiencing any of the difficulties outlined above. Nevertheless, most of the available scientific and social science evidence supports the notion that, the younger the child or adolescent, the higher his/her vulnerability to experiencing these ills. The odds are not in teenagers' favor, compared to their adult counterparts, when it comes to their sexual health and well-being. While teaching the ideal, sexuality educators must also ground themselves in their social realities and provide teens with the resources (information and social support) to minimize potential risks.

The intrinsic value of sexual abstinence for children and adolescents, therefore, is easily supported by empirical data and logical arguments, from multiple perspectives. It is, indeed, a healthy practice and it plays a major role in adolescents' psychosocial, physical, and spiritual development. Unfortunately, abstinence education debates in the USA have been mired in controversies about political agendas, pedagogical approaches, and content coverage; it is here that expert opinions conflict and clash, often to the neglect of the adolescents themselves.

Cross-References

- ▶ Birth Control
- ► Condom Use
- ► Sexuality Education

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Academic Achievement: Contextual Influences

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Academic achievement subsumes a number of indicators to measure cognitive gains and progression through the US educational system. Regardless of the operationalization, the link between academic achievement and later life prospects is well established in the extant literature. Adolescents who earn poorer grades in school are more likely to be retained in grade, to fall behind in credit accrual, and to earn lower achievement test scores, all of which are associated with lower high school completion rates and higher dropout rates (Battin-Pearson et al. 2000; Stearns et al. 2007). High school dropouts, in turn, have lower household incomes, lower occupational status, difficulty finding and maintaining employment, higher incarceration rates, and greater health issues, all of which cost society in terms of lost tax revenue and increased reliance on governmental social services (Rumberger 2001). Although academic achievement is strongly associated with cognitive ability and motivation (Eccles et al. 2003), a comprehensive understanding of adolescents' academic achievement must take into account how the ecological contexts in which adolescents are embedded promote or inhibit their academic achievement.

Academic Achievement in Context

There is a growing recognition among developmentalists that environmental contexts, such as families, schools, and peers, affect numerous developmental domains, including academic achievement (Chung and Steinberg 2006; Cook et al. 2002). Ecological theory provides one lens for exploring the interactions between the individual and both distal and more proximal ecological contexts, interactions that ultimately drive adolescent development, including academic achievement (Bronfenbrenner 1979). During adolescence, the most common proximal contexts in individuals' lives are families, schools, and peers (Steinberg and Morris 2001). The structures of these environments as well as the interactions that occur therein can either promote or inhibit adolescents' academic achievement.

An exploration of adolescents' academic achievement must also be situated in an understanding of the larger stratification systems in the US, stratification reflected in the achievement gap between low-income and more affluent youth as well as the gap between African-American and Latino youth as compared to their White and Asian-American peers (Farkas 2003). Although a more distal factor, the sociohistorical context in which adolescents develop, including existing stratification systems in the US generally and in the

American educational system more specifically, shapes educational opportunities and academic prospects. As such, a comprehensive understanding of adolescents' academic achievement must entail understanding the larger stratification systems as well as the more proximal contexts of adolescents' development.

Stratification and Academic Achievement

The achievement gap between African-American and Latino students and their White and Asian-American peers is well established, as is the achievement gap between poor and non-poor youth in the US. National statistics show that African-American youth are most likely to have been retained in grade before ninth grade (16%), followed by Latino (11%) and White (8%) students. Poor students' retention rates (23%) are almost five times that of non-poor students (5%). Moreover, the achievement divide between these demographic groups only widens across time. Dropout rates for Asian-American (3%) and White (6%) students are relatively low compared to those of African-American (12%) and Latino students (20%), and the dropout rates of low-income youth are approximately five times that of high-income youth (NCES 2009).

Research further metes out the gaps reflected in overall national trends. In comparing standardized achievement test scores for the various race/ethnic groups, research consistently documents the achievement divide (Anderson and Keith 1997; Caldas and Bankston 1997; Lee 2007). These differences are observed across content areas (i.e., English/language arts, writing, mathematics, science, history) and widen from early to late adolescence (Gregory and Weinstein 2004). The race/ethnic achievement gap is also observed for adolescents' grades in school (Fuligni 1997; Lohman et al. 2007) and their dropout status (Lee and Burkam 2003). Consistent with research on the achievement gap across race/ethnic groups, an achievement gap between low-income and highincome youth is also observed for achievement test scores (Blair et al. 1999; Caldas and Bankston 1997), and the proportion of life spent in poverty is associated with lower reading comprehension achievement test scores during adolescence (Eamon 2005). A more detailed discussion of the effects of household socioeconomic status (including not only income but also family structure and educational and occupational status) as a structural characteristic of families is discussed in greater detail below.

Academic Achievement and the Family Context

Numerous studies have explored the link between the structural characteristics of families and adolescents' academic achievement, with the vast majority focusing on various facets of family socioeconomic status (SES). Higher family SES, as measured by parental educational and occupational status and income, is associated with higher achievement test scores (Felner et al. 1995; Gregory and Weinstein 2004; Lee 2007). Moreover, higher-SES adolescents earn higher grades in school (Fuligni 1997; Lohman et al. 2007; Stewart 2008) and are less likely to drop out of school (Lee and Burkam 2003). More extensive reviews of the poverty literature (see Bradley and Corwyn 2002; McLoyd 1998) detail the pernicious effects of being poor or low-SES for adolescents' academic achievement measured in a number of ways (i.e., achievement test scores, class failure, retention in grade, graduation rates, dropout rates). In addition to SES, family structure is also associated with adolescents' academic achievement adolescents reared in single-parent headed households earn lower achievement test scores (Caldas and Bankston 1997; Lee 2007) and lower grades in school (Lohman et al. 2007; Stewart 2008), are less likely to complete high school, and are more likely to drop out of school (Rumberger 1987) than those reared in intact, two-parent families.

In addition to the influence of familial structural characteristics, the processes that occur within families also influence adolescents' academic achievement. Parents' support for academics, discussions around academics, and provision of educational enrichment in the home are associated with better academic performance, in terms of adolescents' achievement test scores and grades in school (Eamon 2005; Steinberg et al. 1992; Woolley and Grogan-Kaylor 2006). Parents' direct involvement in their adolescents' schools, via activities such as open house attendance, parentteacher association participation, and classroom volunteering, are positively associated with higher test scores and grades (Gutman and Eccles 1999; Park and Bauer 2002; Shumow and Miller 2001). In their metaanalysis of middle-school-aged adolescents' parental

involvement, Hill and Tyson (2009) found that academic socialization practices (e.g., discussions around academics, fostering educational aspirations) were more effective in promoting academic achievement than home-based supports or school-based involvement, findings consistent with an earlier meta-analysis of secondary students residing in urban areas (Jeynes 2007).

In addition to direct involvement in their children's education, other processes within the home also play a role in adolescents' academic success. For example, adolescents who believe their parents are warm and supportive tend to earn higher grades in school (Bean et al. 2003; Benner and Kim 2010; LeCroy and Krysik 2008), have higher achievement test scores (Portes 1999), and show greater growth in achievement test scores across adolescence (Gregory and Weinstein 2004). In contrast, adolescents who report greater emotional distance between themselves and their parents as well as those who report higher levels of conflict and harsh discipline often earn lower grades and score more poorly on standardized achievement tests (Benner and Kim 2010; Crosnoe 2004; Dotterer et al. 2008; Gutman and Eccles 1999). Parents' behavioral control of their adolescents, in terms of monitoring adolescents' activities, is positively associated with higher achievement test scores (Blair et al. 1999; Gregory and Weinstein 2004) and grades (Bean et al. 2003), although the influence of parental monitoring has been found to vary across race/ethnic groups.

In addition to these individual indicators of family processes and interactions, scholars have also examined multiple aspects of parenting simultaneously to identify parenting profiles or typologies, generally focusing on parental warmth and control (see Baumrind 1971; Maccoby and Martin 1983). Studies examining the link between parenting profiles and adolescents' academic achievement find that youth whose parents employ authoritative parenting (high warmth combined with high levels of control) earn higher grades and better achievement test scores than those whose parents employ other parenting styles, although again, some differences emerge across race/ethnic groups (Fletcher et al. 1999; Jeynes 2007; Steinberg et al. 1992). For example, it appears that White and Latino adolescents benefit more academically from authoritative parents than African-American and Asian-American adolescents.

Overall, this body of research suggests that family characteristics, particularly those directly related to economic well-being, influence the academic achievement of adolescents. However, the processes that occur within families can promote stronger achievement – adolescents benefit academically when they have families who are involved in the educational process and who provide warmth and support but also appropriate monitoring of adolescents' day-to-day lives.

Academic Achievement and the School Context

The school is another primary context of socialization during adolescence, and the relationship between school structural characteristics and adolescents' performance is well established. Adolescents in highpoverty schools (generally measured by the percentage of students qualifying for the federal school lunch program) and schools with high percentages of race/ ethnic minority students generally experience more academic difficulties than their peers attending more affluent schools and schools with fewer race/ethnic minority students (Benner and Graham 2009; Caldas and Bankston 1997; Lee and Croninger 1994; Leventhal and Brooks-Gunn 2004). Although not as consistent, in general greater school diversity is associated with higher grades in school and stronger educational attainment (Borman et al. 2004; Goza and Ryabov 2009). Additionally, adolescents enrolled in large schools tend to perform more poorly on standardized tests and exhibit less growth in achievement across time (Lee et al. 1997), earn lower grades in school (Benner and Graham 2009), and have higher dropout rates (Baker et al. 2001; Lee and Burkam 2003) than students attending smaller schools. Similar academic difficulties emerge for adolescents in schools with higher studentto-teacher ratios (Baker et al. 2001; McNeal 1997).

Tracking systems are another structural characteristics of many American middle and high schools. Tracking, whether it emerges de facto or as a more systemic practice, "places students who appear to have similar educational needs and abilities into separate classes and programs of instruction" (Oakes 1987, p. 131). Higher socioeconomic diversity and race/ethnic diversity are associated with more pronounced de facto tracking in mathematics and English courses in American schools (Lucas and Berends 2002), and in general, research suggests that track placement serves to

only promote and reinforce existing academic inequalities, with African-American and Latino adolescents and low-income adolescents being placed in the "lower" tracks at substantially higher rates than their White, Asian-American, and more affluent peers (Oakes 2005). Not surprisingly, adolescents' track placement has a significant influence on changes in their academic achievement across time, such that placement in higher tracks (i.e., honors, advanced) promotes greater achievement than placement in lower tracks (i.e., very basic, basic; Hallinan 1994; Oakes 2005). The structure of tracking systems also influences adolescents' achievement - when there is immobility within tracking systems (i.e., little movement of students changing academic tracks across time), a greater achievement gap in achievement test scores exists between tracks, whereas high levels of inclusiveness in a tracking system (i.e., proportion of students in a college-preparatory curriculum) are associated with a smaller gap in achievement across tracks (Gamoran 1992).

School transitions, normative experiences that occur when adolescents enter middle or junior high school and high school, involve a shift in both the structural characteristics of the schools adolescents attend and the relationships and interactions that occur within and across the school contexts. As such, it is not surprising that school transitions are influential for adolescents' academic achievement. Initial research posited that the academic challenges experienced in early adolescence were due to the developmental transition into adolescence, but Simmons and Blyth's (1987) groundbreaking work illustrated that the transition to middle school was a driving force in explaining early adolescents' academic declines. Subsequent research has corroborated these initial findings, documenting substantial declines in both grades and teacher-rated academic performance from elementary to middle school (Gutman and Midgley 2000; Rudolph et al. 2001). Although less is known about the transition to high school, scholars identify similar achievement disruptions across the high school transition (Barber and Olsen 2004; Reyes et al. 1994). Research suggests that the declines observed across the high school transition persist across the first 2 years of high school and are particularly disruptive for incongruent African-American and Latino adolescents who transition to high school with few same-ethnicity peers (Benner and Graham 2009).

Interactions that occur within schools, beyond the changes in those interactions observed across school transitions, also influence adolescents' academic achievement. Interactions specifically around academics, beyond the obvious instructional activities, promote academic achievement during adolescence. For example, when adolescents believe their teachers have high regard for them as students, they earn higher grades in school (Roeser and Eccles 1998), consistent with the extensive teacher expectancies literature that highlights a strong link between teachers' educational expectations for students and students' academic achievement (Gill and Reynolds 1999; Muller et al. 1999; Smith et al. 1998). Although teacher opinions about particular students can influence academic achievement, teachers' overall views of the academic caliber of students in their schools are also linked to adolescents' academic success. For example, teachers' general ratings of the achievement orientation of the student body are associated with adolescents' reading and math achievement test scores as well as their grades in school (Brand et al. 2008).

In addition to interactions and processes directly tied to academics, the emotional connections within schools are also important for adolescents' academic achievement. When adolescents feel closer to their teachers and express more positive perceptions about student-teacher relationships, adolescents exhibit stronger academic achievement, in terms of achievement test score growth, grades in school, and dropout status (Crosnoe 2004; Gregory and Weinstein 2004; Lee and Burkam 2003; Woolley and Grogan-Kaylor 2006), although interestingly, teacher perceptions of the student-teacher relationship are not predictive of adolescents' achievement (Brand et al. 2008). Similar trends are observed for more general ratings of school climate - adolescents who view their schools more favorably and feel more connected to their schools receive higher grades (LeCroy and Krysik 2008; Stewart 2008; Zand and Thomson 2005) and earn higher scores on achievement tests (Eamon 2005) than those who view their schools more negatively. Perceptions of specific aspects of the school climate are also important for adolescents' academic success. For example, adolescents who report more positive evaluations of their schools' interracial climates have better academic achievement (Mattison and Aber 2007). Similarly, perceptions of school safety also promote academic

performance – when adolescents are in schools that they perceive as more safe or that their teachers rate as more safe, they perform better on achievement tests (Brand et al. 2008; Leventhal and Brooks-Gunn 2004) and are less likely to drop out of school (Rumberger 1995). Adolescents also perform better academically when in schools where teachers rate the student body as less disruptive (Brand et al. 2008).

Overall, the patterns of influence observed in the school context closely mirror those observed at the family level. The structural characteristics of schools, particularly the SES and racial/ethnic make-up of schools, are directly related to adolescents' academic achievement. Yet this body of research suggests that the processes and interactions that occur within schools can promote the academic achievement of all students, with adolescents benefitting from close bonds with their teachers specifically and their schools more generally.

Academic Achievement and the Peer Context

Although research linking the structural characteristics of peer/friendship groups to academic achievement is more rare, evidence suggests that these characteristics do in fact play a role in adolescents' achievement. For example, adolescents with higher-SES peers generally earn higher grades and are more likely to complete high school than those with lower SES peers, although these effects are often race/ethnic dependent (Goza and Ryabov 2009). The academic achievement of an adolescents' peer group is also linked to their own academic achievement. Whether examining reciprocated friendships or larger peer networks, the grades of those with whom adolescents are closest are positively associated with adolescents' own grades in school (Altermatt and Pomerantz 2005; Mounts and Steinberg 1995; Ryan 2001). Similarly, when adolescents are embedded in highly dense networks of high achieving peers, they have the highest achievement levels, whereas adolescents embedded in highly dense networks of low-achieving peers have the worst achievement (Maroulis and Gomez 2008). Related to this, adolescents who have more friends who have dropped out of school have a greater likelihood of later dropping out themselves (Ream and Rumberger 2008).

In addition to the structural characteristics of peer groups and friendship groups, the quality and support adolescents receive from these significant others also influences their academic achievement. Not surprisingly, when adolescents' peers are achievement oriented and provide academic support, adolescents typically earn higher grades in school (Herman 2009; LeCroy and Krysik 2008; Steinberg et al. 1992; Stewart 2008; Wentzel et al. 2004) and have a lower likelihood of later school dropout (Ream and Rumberger 2008). More generally, associating with prosocial peers is linked to higher grades in school (Wentzel et al. 2004), whereas having more deviant and disruptive peers is associated with poorer school performance during adolescence (Berndt and Keefe 1995; Fuligni et al. 2001). Feeling accepted by peers, whether measured as a reciprocated friendship or by more general ratings of support and acceptance, is positively associated with adolescents' academic achievement (Hartup 1996; Wentzel et al. 2004; Wentzel and Caldwell 1997). Victimization by peers, in contrast, is associated with poorer school performance (Graham et al. 2006; Juvonen et al. 2000).

The link between peer processes and achievement has received particular attention from scholars examining oppositional identity and the "burden of acting white" for African-American adolescents (Fordham and Ogbu 1986). Fordham and Ogbu argued that the underachievement of African-American adolescents is linked, in part, to a peer culture that devalues academic effort and achievement, labeling it "acting white." A number of studies have challenged the theses of Fordham and Ogbu, acknowledging that although adolescents of color may experience peers' accusations of acting White, these accusations do not influence subsequent academic adolescents' achievement (Ainsworth-Darnell and Downey 1998; Bergin and Cooks 2002). Moreover, Tyson and colleagues (2005) identify not only racialized peer pressure with African-American adolescents, but also class-based peer pressure with White adolescents, where lower-income White adolescents equate academic achievement with acting "high and mighty" (p. 598).

Overall, although the research linking adolescents' peer groups to their academic achievement is more scarce, a clear pattern emerges. When adolescents have friends who perform better in school, are more oriented to school, and provide more academic support, adolescents benefit academically. In addition to the academic characteristics of peers and academically based interactions, more general emotional support

and friendship quality also seemingly promote academic success during adolescence, whereas rejection and victimization by peers is detrimental to adolescents' academic well-being.

Future Directions of the Adolescent Academic Achievement Literature

Across the primary contexts of adolescents' development – families, schools, and peer groups – a consistent pattern of findings links both the structural characteristics of each context and the processes and interactions that occur therein with adolescents' academic achievement. When contexts are characterized by more resources and less social marginalization, adolescents perform better academically. Moreover, warm, academics-oriented relationships within each context promote academic achievement and educational growth. Although these patterns are clear, much is left to explore in relation to adolescents' academic achievement, and ecological theory serves as an important guide for future inquiry.

First, ecological theory suggests a fundamental interplay between the structural characteristics of a given ecological context and the processes that occur within that context, yet researchers sometimes conflate structure and process and create models that do not differentiate between the two. Future research on adolescents' academic achievement should examine how the structural characteristics of families, schools, and peer groups influence the processes and interactions that occur within these contexts (see Benner et al. 2008 for an example). Investigation of the differential effects of structure and process will provide insights into what aspects of contexts are more amenable and malleable to change in order to better promote adolescents' academic success.

A second area ripe for future inquiry relates to the interplay across the ecological contexts of adolescence. The contexts of adolescents' development do not exist within a vacuum – parents attend activities at their children's schools, teachers' promote academic involvement and support in homes, peers interact both within and outside the confines of school. These cross-context interactions, as well as the consistency in relations across contexts, influence adolescent development, yet researchers have, with few exceptions, ignored these mesosystemic influences. Those scholars

who have explored cross-system interactions have highlighted the importance of these for adolescents' academic achievement. For example, Crosnoe (2004) found that close relations to parents were associated with higher grades in school when adolescents also attended schools with more positive student-teacher bonds. Similarly, Gregory and Weinstein (2004) found that monitoring and regulation by parents and teachers exerted an additive effect for adolescents' mathematics achievement. Future research should further explore the additive (and possibly compensatory) nature of relationships across ecological contexts as well as the extent to which the structural characteristics of a given context might influence cross-context interactions. It is through understanding these more nuanced processes and interactions that we will be able to more effectively promote the academic achievement of all adolescents.

Cross-References

- ► Educational Aspirations
- ► Vocational Education

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Academic Self-efficacy

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Overview

Time spent in learning accounts for a large portion of an adolescent's life. Enjoyment in learning activities, adjustment in the school setting, and academic achievement represent desired attainments for both students and their families. A vast literature additionally shows that these attainments influence children's course of life, by affecting their scholastic choices and professional aspirations, as well as their psychosocial development and well-being. Among the factors contributing to these attainments are academic selfefficacy beliefs and optimal experience in learning. The first part of this essay will illustrate the two constructs and related assessment methodologies. The short- and long-term developmental outcomes of the constructs will also be outlined, as well as the contextual and individual factors contributing to optimal learning environment and experience. The second part will present a model combining academic selfefficacy beliefs and optimal experience, and will bring forward future directions for research and practice.

Introduction

Learning at school is one of the major means through which culturally relevant information is transmitted, with the view to provide individuals with the knowledge required to identify and fulfill their role in society. On the one hand, a great number of studies attest to the natural human tendency to learn and the thirst for knowledge in young children (Shernoff and Csikszentmihalyi 2009). On the other hand, findings in western countries highlight that once children enter the formal school system, they start to report lack of interest, disengagement, and apathy toward learning, which can lead to poor concepts assimilation and eventually to school dropout. Obstacles to learning usually include disruptive thoughts, dysfunctional emotional reactions, negative interpersonal relationships, and poor organizational skills. This is much more true of adolescents who tend to be even less engaged in school activities. In order to shed light on the reasons for such learning disaffection and to identify intervention strategies promoting engagement in school activities, scholars in the 1960s and 1970s have advocated the agentic role of students in regulating academic learning. In particular, two theories have proved successful in providing sound empirical evidence and models of academic learning: Bandura's social-cognitive theory (1997) and Csikszentmihalyi's flow theory (1975/ 2000). The first part of this essay will illustrate the two theoretical frameworks, related methodology, and major findings connected to the learning domain. The second part will present a model building a bridge between the two theories, and will bring forward future directions for research and practice.

Self-efficacy Beliefs in Bandura's Social-Cognitive Theory

Bandura's social-cognitive theory stresses the active and proactive role individuals play in shaping the course of their life (Bandura 1986, 2001). People are viewed as self-regulating agents whose development takes place in complex transactions within a network of socio-structural and psychosocial influences, where individuals are both producers and products of their social systems. During these transactions, individuals play a decisive role in setting goals, in choosing which paths to follow, and in selecting the activities and social relationships that are most appropriate to their choices.

Among the mechanisms of human agency, a pervasive influence is played by self-efficacy beliefs, namely, the beliefs that individuals hold about their capacity to exert control over the events that affect

their lives, and to organize and execute courses of action to attain designed goals. Any other factor that may operate as motivator in people's efforts to reach their goals is rooted in the core belief that one has the power to produce effects by one's own actions (Bandura 1997, 2001). Self-efficacy beliefs directly contribute to decisions, actions, and experiences, as people reflect upon their capacities when deciding whether to undertake challenging activities or to persist in pursuing difficult tasks. Findings have documented the influential role of self-efficacy beliefs in various domains of functioning such as learning, work, sports, health, social adjustment, and well-being, in different conditions and phases of life (for a review, see Bandura 1997, 2001). Moreover, the functional role of perceived self-efficacy and the processes through which it operates have been confirmed across cultures (Bandura 2002).

Compared to other psychological constructs, perceived self-efficacy has a variety of distinctive characteristics. First, it concerns perceived capacities to perform an activity or to manage a task, and not personality traits (i.e., extraversion) or other general psychological characteristics (i.e., self-esteem). Second, self-efficacy beliefs are not only domain-specific, but may also be context- and task-specific. Moreover, they vary across several dimensions, such as level, generality, and strength. The level of perceived self-efficacy refers to its dependence on the difficulty level of a particular task (i.e., a math addition problem); generality refers to the transferability of one's efficacy judgements across different tasks, contexts, or domains; finally, strength pertains to the confidence with which one can perform a specific task or activity.

Self-efficacy Beliefs' Assessment

The distinctive features of self-efficacy described above have implications for the construct measurement. As the efficacy beliefs system is not a global trait but a differentiated set of self-beliefs linked to distinct realms of functioning, only multi-domain measures can adequately reveal the pattern and degree of generality of people's sense of personal efficacy. The "one measure fits all" approach has a limited explanatory and predictive value because most of the items in such a measure may have little or no relevance to the specific domain of functioning or task one is interested to evaluate. Self-efficacy beliefs covary across distinct domains only when different spheres of activity are

governed by similar subskills, or when skills in diverse domains are developed together.

All over the world, scales were developed to measure people's self-efficacy beliefs in different life domains. In the academic settings, there are scales assessing students' perceived capabilities to learn specific subjects (e.g., the "Self-efficacy to Learn Statistics" scale; Finney and Schraw 2003); scales measuring the perceived capabilities to apply successful learning strategies (e.g., the "Self-Efficacy for Learning Form"; Zimmerman et al. 2005); and multi-domain scales, assessing students' capacity to enlist social resources, to learn specific subjects, and to self-regulate their learning activities (e.g., the measure developed by Bandura 2006).

New scales can be designed by scholars and educators interested in measuring self-efficacy beliefs in specific contexts and in relation to particular domains or tasks. The guidelines developed by Bandura (2006) enlist the main rules that have to be respected in order to build a proper self-efficacy scale. First, the construction of a scale primarily relies on a good conceptual analysis of the domain of interest, as the knowledge of the activity domain specifies which aspects of personal efficacy should be measured. In particular, a comprehensive efficacy assessment should be linked to the behavioral factors that mostly determine the quality of functioning in the domain and over which people can exercise some control. Second, efficacy items should accurately reflect the construct of selfefficacy. They should be phrased in terms of "can do", as the "can" phrase reflects a judgment of capability ("Can you finish your homework assignments by deadline?"). Perceived self-efficacy should be measured against levels of task demands that represent challenges or difficulties to successful performance. Self-efficacy judgements reflect the level of difficulty individuals believe they can surmount. If there are no obstacles to overcome, the activity is easily performable, and everyone is highly efficacious. For instance, every student can state he or she feels able to "get him or herself to study" when there is no challenge or impediment, but only the most efficacious will judge themselves very capable to "get themselves to study when there are other interesting things to do". The nature and level of the challenges against which personal efficacy is judged will vary depending on the sphere of activity and may be graded in terms of level of exertion, accuracy,

productivity, threat, or self-regulation required. Constructing scales to assess self-efficacy thus requires preliminary work to identify specific challenges and impediments. In preliminary phases, people are usually asked to describe the things that make it hard for them to perform the required activities on a regular basis. The identified challenges or impediments are then inserted into the efficacy items, and respondents are asked to judge their ability to meet the challenges or to overcome the various impediments. At last, item format should present sufficient gradations to guarantee a variety of answers in the population and to avoid ceiling effects.

Self-efficacy Beliefs in Educational Settings

Research on adolescents' academic perceived selfefficacy, namely, their self-beliefs in managing activities connected to learning processes and success at school, is extremely wide and has been conducted in different cultures (see for major reviews: Bandura 1997; Pajares 1996, 1997; Schunk and Pajares 2004). Studies used various assessment scales and adopted different research designs. In experimental studies, self-efficacy beliefs were usually manipulated in order to assess their effect on students' performance. In nonexperimental studies, the relationship of efficacy beliefs with indicators of students' performance or well-adjustment was evaluated cross-sectionally or longitudinally. Other studies specifically evaluated the effectiveness of longterm interventions aimed to strengthen students' perceived self-efficacy through trainings based on the sources of self-efficacy identified by Bandura. Overall, research demonstrated that self-efficacy beliefs influence students' academic and career choices, as well as motivational factors and learning strategies that promote success at school.

Academic Choices and Career

Self-efficacy beliefs influence academic choices as students are prone to engage in tasks in which they feel confident and avoid those in which they do not. Especially in high school and college, where students have greater control over activity selection, their efficacy beliefs strongly influence course choices and academic career (Britner and Pajares 2006). For example, several studies conducted in the areas of science and mathematics showed that perceived self-efficacy is more

predictive of interest in and choice of these learning domains than prior achievement and outcome expectations (e.g., Lent et al. 1993; Pajares and Miller 1995). In addition, adolescents' academic self-efficacy has been demonstrated to affect career trajectories through occupational self-efficacy (Bandura et al. 2001).

Motivation and Learning Strategies

Once an activity is chosen, self-efficacy beliefs contribute to its accomplishment through a number of motivational factors (see Schunk and Miller 2002, for a review). Perceived self-efficacy determines the effort students will expend on activities and their perseverance in front of obstacles and difficulties (e.g., Bouffard-Bouchard et al. 1991; Gore 2006). Confident students approach difficult tasks as challenges to be mastered rather than as threats to be avoided. They have greater intrinsic motivation, set themselves challenging goals, and maintain strong commitment to them. Moreover, they more quickly regain their confidence after failures or setbacks, and they attribute failure to insufficient effort or lack of acquirable knowledge and skills (Schunk 1998; Zimmerman et al. 1992). Conversely, students with low self-efficacy tend to believe that things are more difficult than they really are, and they are likely to attribute their failure to inborn and permanent lack of ability. Both sets of thoughts foster negative emotions and determine low confidence in personal capabilities. Students with higher self-efficacy beliefs also use more effective cognitive and meta-cognitive learning strategies and show greater flexibility in their use, as shown by Zimmerman and his colleagues in their extensive line of inquiry on the relationships between self-efficacy beliefs, academic self-regulatory strategies, and academic achievement. They demonstrated that self-efficacy beliefs influence self-regulatory processes such as goal setting, selfmonitoring, self-evaluation, and strategy (Zimmerman and Cleary 2006).

Academic Achievement

There is ample empirical evidence that self-efficacy beliefs are related to and exert an influence on academic achievement, either directly or through the influence of other personal achievement predictors, such as previous achievement, skills, and mental abilities (see Pajares and Schunk 2001, for a review). Early adolescents' perceived academic self-efficacy has also been

demonstrated to mediate the influence of external factors such as parents' own efficacy beliefs and aspirations, and the family's socioeconomic status (Bandura et al. 1996).

Longitudinal studies attested to the long-lasting effect of efficacy beliefs on academic achievement and likelihood of dropping out of school (Caprara et al. 2008). A general decline in efficacy beliefs has also been observed from junior high to high school, as a consequence of the increasing demands and pressures on children's academic performance. However, that decline is weaker for children with higher self-efficacy beliefs. The effects of efficacy beliefs on achievement are usually stronger for high school and college students than for elementary students. In particular, recent empirical studies and meta-analyses demonstrated the strong predictive value of efficacy beliefs on late adolescents' performance in college (Gore 2006; Robbins et al. 2004). The strongest effects were obtained when achievement was assessed through basic skills measures or classroom-based indices such as grades. Moreover, although a reciprocal influence between self-efficacy beliefs and school attainments can be hypothesized, Schunk and his colleagues showed the causal influence of perceived self-efficacy on students' achievementrelated behaviors. In particular, they detected that the increase of self-efficacy through instructional strategies resulted in improved academic performances (e.g., Schunk and Swartz 1993).

Factors Promoting Students' Self-efficacy Beliefs

Bandura (1986, 1997) identified four main sources of self-efficacy: personal mastery, physiological reactions, vicarious experiences, and forms of persuasion. (1) Personal mastery experiences are the strongest source for enhancing perceptions of self-efficacy. In general, frequent successes boost self-efficacy, whereas consistent failure experiences usually undermine it. However, this process is not completely automatic, as personal accomplishments are interpreted in light of one's self-regulatory processes, such as self-evaluations, attributions, and goal setting. For instance, perceived self-efficacy depends on the individual evaluation of circumstances and external factors; if a student does well on a math test but judges it easier than typical math tests, it is unlikely that his or her efficacy beliefs will change. (2) Physiological reactions can also

influence a student's efficacy judgement. If a student gets extremely anxious during a classwork, he or she may interpret the rapid heart rate as an indicator of personal ineffectiveness. (3) Adolescents also judge their level of self-efficacy through vicarious experiences, such as modeling, defined as the behavioral, cognitive, and affective changes resulting from observing other individuals. Models may be different types of individuals (peers or adults) and can take various forms (live or symbolic). Their effectiveness will be strongest when observers believe they are similar to the model in terms of age, gender, and ability. (4) Finally, also social persuasion can shape students' efficacy perceptions. In the learning settings, teachers and parents may promote students' positive efficacy beliefs using various form of verbal persuasion aimed at encouraging (e.g., "I'm sure you can do it") and reassuring them (e.g., "You will do better on the next exam"), as well as providing specific feedback that clearly link performance and its progress, with strategy use (e.g., "You failed because you used a wrong way to study. I'll suggest..."). This form of social persuasion has a strong long-lasting effect as it encourages students to view academic success and failure in terms of controllable personal strategies that can be learned and progressively improved.

Optimal Experience and Psychological Selection

Another line of research that has brought about valuable contributions in the educational setting focuses on the phenomenology of learning experience. Csikszentmihalyi's flow theory (1975/2000) belongs to the well-established humanistic tradition in psychology, stressing the crucial role of subjective experience in individuals' interaction with their daily context. Subjective experience comprises cognitive, emotional, and motivational components, and represents the conscious processing of information coming from the individual's outer and inner worlds. As attentional processes regulating the stream of conscious experience are a limited psychic resource, only a selected amount of this information will be processed (Csikszentmihalyi 1978). Csikszentmihalyi has identified the quality of experience as the selection criterion of the content in consciousness. In their daily lives, individuals associate activities and situations with different experiential states, based on the challenges or opportunities for

action perceived in such activities and situations, and on the skills they perceive to possess in facing such challenges. In particular, empirical findings showed that people report a globally positive and complex experience in activities or situations in which they perceive high challenges matched with adequate high skills (Massimini et al. 1987). Such condition has been defined as optimal experience or flow. It is characterized by deep concentration, absorption, enjoyment, control of the situation, clear-cut feedback on the course of the activity, clear goals, and intrinsic reward. The term "flow" expresses the feeling of fluidity and continuity in concentration and action described by most participants (Csikszentmihalyi and Csikszentmihalyi 1988).

Several cross-cultural studies, conducted on samples widely differing in age, educational level, and occupation, have shown that optimal experience can occur during the most various activities of daily life, such as work, study, parenting, sports, arts and crafts, social interactions, and religious practice (Delle Fave and Bassi 2009; Delle Fave and Massimini 2004; Hektner et al. 2007; Massimini and Delle Fave 2000). However, regardless of the activity, the onset of optimal experience is associated with a specific condition: The ongoing task has to be challenging enough to require concentration and engagement, and to promote satisfaction in the use of personal skills.

These studies also shed light on the psychological structure of optimal experience (Delle Fave and Massimini 2005). It comprises a cognitive and stable core, represented by components such as high concentration and control of the situation. These components do not show remarkable variations across samples and activities. On the contrary, affective and motivational variables widely vary across activities. Therefore, optimal experience represents a multifaceted construct with stable cognitive features, around which motivational and emotional components fluctuate in intensity according to the associated activities. More specifically, regarding motivational variables, wide cross-domain variations were detected in the values of perceived goals and short-term activity desirability. In particular, in productive activities – such as study and work – the perception of goals is prominent, but the short-term desirability is perceived as significantly lower than in other domains. Social interactions and leisure activities are characterized by both short-term desirability and

high values of long-term goals; passive entertainment activities, such as watching TV, are characterized by short-term desirability, but by the lowest perception of goals.

Research has shown that, by virtue of its positive and complex characteristics, optimal experience represents an important indicator of individuals' optimal psychological functioning. From the wider perspective of the theory of psychological selection (Massimini and Delle Fave 2000), flow experience plays a key role in promoting individuals' long-term development. The positive features of this complex state of consciousness foster the active investment of time and effort in the practice and cultivation of the associated activities. This progressively leads to an increase in related skills and competencies, and to the search for higher challenges in order to support the engagement, concentration, and involvement that characterize optimal experience (Delle Fave et al. 2009). This process therefore gives rise to a virtuous cycle promoting individual development, through both the selective acquisition of increasingly complex information and the refinement of related personal competencies (Massimini and Delle Fave 2000). It also supports the creation of an individual life theme, that is, the interests and goals a person preferentially cultivates during his or her life (Csikszentmihalyi and Beattie 1979).

The Investigation of Optimal Experience: Instruments and Models

Several research procedures have been developed to investigate the daily fluctuations of subjective experience and the occurrence of flow. Among them, the most widely used are Experience Sampling Method (ESM) (Csikszentmihalyi et al. 1977; Hektner et al. 2007), Flow Questionnaire (Csikszentmihalyi 1975/2000; Delle Fave and Massimini 1991), and the Flow State Scale-2 (Jackson and Eklund 2002). The first two instruments were widely used in the educational setting and are thus described below.

Experience Sampling Method (ESM) provides information on contextual and experiential aspects of daily life through online repeated self-reports that participants fill out during the real unfolding of daily events and situations. In a standard ESM study, participants carry for 1 week an electronic device sending random signals six to eight times a day during waking hours. They are asked to fill out a form at each signal

reception. ESM forms comprise open-ended questions investigating the ongoing activities, location and social context, the content of thought, the desired activities, places and interactions, if any. Likert-type scales assess the level of affective, cognitive, motivational variables, as well as the level of perceived challenges and skills, personal satisfaction, short- and long-term importance of the activity. In order to explore the relationship between challenge and skill perception on the one side and the quality of experience on the other side, a model of analysis has been developed, the Experience Fluctuation Model (EFM; Massimini et al. 1987). The analysis of ESM data through the EFM showed a recurrent association between specific challenge/skill ratios and specific experiences. In particular, the perception of challenge and skill values as balanced above average is associated with optimal experience. On the opposite, the balance between perceived below-average values of challenges and skills is associated with a state of disengagement and disorder defined as apathy.

Optimal experience can also be assessed by means of single administration questionnaires, among which Flow Questionnaire is the most commonly used in the educational setting. Participants are asked to read three quotations that describe optimal experience, to report whether they have ever had similar experiences in their life and, if so, to list the associated activities or situations (also defined optimal activities). Subsequently, participants are asked to describe such an experience through 0–8 point scales investigating cognitive, affective, and motivational variables. The individual and environmental conditions which contribute to the onset and maintenance of optimal experience are also investigated.

Optimal Experience and Learning

Research on optimal experience and learning has mainly been conducted with ESM, thus allowing for the online investigation of learning activities as well as the quality of associated experience. Studies on adolescents were performed in different countries and cultures, shedding light on the quality of experience in learning, the contextual and individual factors contributing to flow onset in learning activities, as well as the impact of optimal experience in learning activities on students' short-term well-being and long-term development.

Quality of Experience in Learning

Based on ESM assessments, adolescents devote between 40% and 78% of their daily time budget to learning activities, be they academic tasks performed at school or studying at home (Hektner et al. 2007). Across cultures, learning activities represent potentially challenging opportunities for self-expression and creativity (Delle Fave and Massimini 2005; Hektner et al. 2007; Shernoff and Csikszentmihalyi 2009). In particular, students associate them with high cognitive investment, the perception of long-term goals, and shortterm stakes. However, they also describe low levels of happiness, intrinsic motivation, and short-term desirability. When students report a match between high challenges and high skills, as in optimal experience, the quality of the learning experience improves in its cognitive, emotional, and motivational dimensions, even though short-term desirability still hits negative values.

In addition, a difference emerged between schoolwork activities – such as listening to lectures and taking notes - and homework tasks (Bassi and Delle Fave 2004; Hektner et al. 2007). The former are more frequently associated with apathy and disengagement, whereas the latter with optimal experience. Such difference can be related to the degree of perceived autonomy and self-regulation students describe in the two contexts. At school, learning activities are primarily directed by the teachers, both in terms of lesson contents and of amount of time devoted to a given task. In this condition, adolescents mostly report passively listening to lessons, finding in it low meaningful challenges and no room for skill investment. While at home, on the other hand, they are in control of learning activities, are free to decide how much time to devote to learning, and are thus more likely to experience flow and active engagement in the task at hand.

Contextual and Individual Variables Favoring Flow in Learning

Contextual factors play a relevant role in the occurrence and cultivation of optimal experience. The process of psychological selection is partially regulated by the set of norms and rules that characterizes the cultural system individuals live in (Csikszentmihalyi and Massimini 1985). Cultural constraints also contribute to define the range and variety of activities available to the individuals as potential opportunities for optimal experiences (Delle Fave and Massimini 2004).

In particular, formal education is crucial both for individuals' adjustment to society and for the transmission and perpetuation of cultural information. Cultures differ in the importance attached to academic learning and the strategies adopted to transmit it. For example, studies have shown that Asian and Asian-American students tend to report a more positive learning experience, and to retrieve more opportunities for optimal experience in school activities than their Western Caucasian counterparts (Asakawa and Csikszentmihalyi 1998; Shernoff and Schmidt 2008).

Family and school represent the proximal environment in the first stages of development that strongly influences individual's discovery and cultivation of optimal activities. The interaction patterns within the family can facilitate or hamper the natural tendency of children to selectively reproduce rewarding activities. Studies on the role of family in sustaining adolescents' active engagement in learning have shown that parents can represent models of commitment to self-determined goals (Hektner 2001). In particular, children whose parents place high relevance on academic activities and provide both support and challenge in the learning process are more likely to enjoy learning and to associate it with optimal experience (Rathunde 2001).

At the school level, various factors have been shown to impact on students' retrieval of optimal experiences. A notion-centered school environment can lead students to the development of a passive and compulsory learning strategy; on the opposite, a learning environment that enables students to find meaningful relations between study contents and personal experience and goals can help them discover the rewarding features of knowledge and the potential of learning tasks as opportunities for optimal experience (Shernoff and Csikszentmihalyi 2009). As shown above, teachers play a major role in promoting students' optimal experience at school through the degree of autonomy they give to learners. Teachers frequently report that students' engagement in academic activities supports their optimal experiences in teaching; in their turn, students indicate that their flow in learning is related to the teachers' enthusiasm (Hektner et al. 2007). However, the simultaneous ESM assessment of students' and teachers' experience at school has shown an alarming discrepancy: While teachers mostly report flow while teaching, students mostly report apathy while listening to classes and taking notes. Again, this may be related to

the difference in perceived control. While teaching, teachers are in control of instruction, but students are not. This tentative explanation can also apply to the different quality of experience students associate with various learning activities. Comparing five most common in-class activities (TV/video, lecture, group work, individual work, and test/quiz), studies have shown that adolescents are more engaged in group and individual work than while listening to a lecture or watching TV or a video; while taking a test or quiz, students report very high levels of concentration but low enjoyment (Shernoff and Csikszentmihalyi 2009).

Also individual factors play a relevant role in the occurrence and cultivation of optimal experience in learning (Delle Fave et al. 2009). Evidence has shown that biological predispositions and specific talents influence the orientations of psychological selection and the perceived opportunities for optimal experience. Studies with talented teenagers (Csikszentmihalyi et al. 1993) have highlighted the relationship between talents in specific domains, such as music or mathematics, and the selective long-term engagement in these domains as opportunities for optimal experiences and skill cultivation. Also, personality characteristics are associated with the occurrence of optimal experience in learning; these include optimism, self-esteem, and extraversion (Schmidt et al. 2007). Moreover, female high school students tend to report flow in classrooms more frequently than males (Shernoff and Schmidt 2008). However, this may be related to the higher frequency of optimal experience reported by girls across all contexts. Finally, studies with US participants also identified differences in optimal experience based on age, with older students (12th graders) reporting more occasions for flow than younger students (10th graders) (Hektner et al. 2007; Shernoff and Schmidt 2008).

Short-Term and Long-Term Impact of Flow on Adolescent's Development

A great number of studies have shown that the association of learning activities with optimal experience has both short- and long-term consequences (Hektner et al. 2007, and Shernoff and Csikszentmihalyi 2009, for a review). In the short term, students derive enjoyment, intrinsic reward, and sense of mastery from learning tasks (Delle Fave and Bassi 2000). They additionally report high levels of engagement which, in its turn, is reflected in high academic achievement

and grades (Shernoff and Schmidt 2008). In the long term, research has highlighted the role of optimal experience in sustaining commitment in learning and in shaping individual life themes (Asakawa and Csikszentmihalyi 1998; Delle Fave and Massimini 2005). Students report longitudinal coherence in the amount of time devoted to study over a 3-year period in secondary school (Hektner 2001). The association of flow with learning activities further contributes to predicting the level of academic career students are willing to pursue, and to shaping adolescents' long-term goals and future work interests (Csikszentmihalyi and Schneider 2000; Hektner 2001; Wong and Csikszentmihalyi 1991).

Merging Perspectives: Self-efficacy Beliefs and Optimal Experience in Learning

In the learning domain, recent attempts have been made to fruitfully join the social-cognitive perspective underlying academic self-efficacy research with the humanistic-phenomenological perspective underlying flow studies (Bassi et al. 2007). Both approaches share the view that individuals are active agents in the interaction with their environment, and stress the role of self-regulation processes in programming future actions on the basis of expectations and beliefs, on the one hand, and of perceived quality of experience, on the other. In addition, both underline the role of perceived abilities and sense of mastery in facing environmental challenges. However, the two approaches also show some differences: Social-cognitive theory places special emphasis on expectancy about success or failure, and on beliefs about one's ability and performance, while the theory of psychological selection focuses on the intrinsic value of engaging in learning activities and its impact on achievement and future plans.

With the aim to better understand adolescents' learning behavior in the short and long term, the cognitive and experiential constructs were combined into a broader framework. It was suggested that self-efficacy beliefs may influence behavior through the mediating effect of associated quality of experience. To put this framework to the test, two groups of Italian secondary school students were selected on the basis of their high and low perceived academic self-efficacy. Through ESM, for 1 week online information was collected on the daily activities and associated quality of experience of the two

groups. In line with expectations, high self-efficacy students devoted more time to learning, especially at home, than low self-efficacy students. They also reported a more positive quality of experience during learning, primarily associating schoolwork (listening to lectures, taking notes), classwork (oral and written tests), and homework with optimal experience. On the contrary, low self-efficacy students did not perceive a great amount of opportunities for optimal experience in learning tasks, and they reported different experiential profiles according to the type of learning activities. More specifically, they primarily associated schoolwork and homework with low challenging experiences, such as apathy and relaxation, and tests and exams with anxiety, reporting a perceived lack of skills in facing the task.

Conclusions and Future Directions

Findings reported in this essay highlight the importance of adolescents' academic self-efficacy beliefs and optimal experience in learning activities as key factors in the promotion of well-adjustment at school, quality learning, and long-term development. The centrality of these constructs is going to increase in contemporary society, where information technologies are introducing extensive changes in educational settings and increasing importance is assigned to students' personal control over learning. Suggestions for intervention as well as future directions in research can be derived from these studies.

At the intervention level (see Pajares and Schunk 2001, and Shernoff and Csikszentmihalyi 2009), results bring forward the need to provide students with learning activities which are challenging enough in the face of personal skills. Lack of challenges can lead to experiences of apathy or disengagement that do not sustain enjoyment in learning and long-term academic commitment (Bassi et al. 2007; Delle Fave and Bassi 2000). At the same time, sense of competence and confidence in one's skills can primarily be raised through successful experiences with the task at hand, namely, through mastery experiences. For example, a series of studies (Pajares and Schunk 2001) showed that students' selfefficacy beliefs increased through the use of instructional strategies such as modeling, goal setting, strategy training, as well as provision of proximal rather than distal goals, rewards, and attributional or progress feedback. Emphasis should also be placed on the development of students' self-regulatory habits, providing

students with optimal learning environments in which both autonomy and initiative are supported.

Concerning future research directions, further studies are needed to devise and test a formal model including academic self-efficacy beliefs and quality of experience in learning. Self-efficacy beliefs are expected to direct behavior through the mediation of perceived quality of experience, and of optimal experience in particular. However, optimal experience in learning activities could have both synchronic and diachronic, cumulative consequences. By providing intrinsic reward, optimal experience can sustain long-term perseverance and effort in cultivating associated activities. It could also represent a feedback to perceived self-efficacy. Direct experience of competence in high challenge/high skill situations could be cognitively elaborated into rather stable self-efficacy beliefs. In their turn, these beliefs could direct time and energy investment into activities in which individuals perceive themselves as highly competent in the face of current challenges. This process would facilitate the retrieval of optimal experiences and the development of lasting high self-efficacy beliefs. In the long run, this process could go on in a virtuous circle, promoting individual development, with respect to skill cultivation, satisfaction, and goal setting. Shedding light on the mutual influences between self-efficacy and flow can advance understanding of adolescents' motivational processes and offer guidelines for promoting enjoyment and engagement in the school setting.

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Acculturation

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Overview

Acculturation was first defined as "phenomena which result when groups of individuals having different

cultures come into continuous first hand contact with subsequent changes in the original culture patterns of either or both groups" (Redfield et al. 1936, p. 149). This original definition stressed continuous, long-term change and allowed for the process to be bidirectional, wherein both of the interacting cultures could make accommodations. The course of the acculturation process has been described as flowing from contact between dominant and nondominant cultural groups to conflict or crises between those groups that eventually results in adaptations by one or both of the conflicting groups. Based on the relationships to the immigrant's culture of origin and the host culture, researchers have emphasized four cultural adaptation styles: separation, assimilation, biculturalism, and cultural marginality. Separation or enculturation has been linked to higher self-esteem. Assimilation appears to be a risk factor for poor health and mental health. Biculturalism has been reported to be the healthiest cultural adaptation style.

Background and Definitions

Acculturation

Acculturation was first defined as "phenomena which result when groups of individuals having different cultures come into continuous first hand contact with subsequent changes in the original culture patterns of either or both groups" (Redfield et al. 1936, p. 149). This original definition stressed continuous, long-term change and allowed for the process to be bidirectional, wherein both of the interacting cultures could make accommodations. During the Cold War era, the definition of acculturation was gradually modified to denote linear, unidirectional change (Trimble 2003) as a result of interactions between dominant and nondominant groups, with nondominant groups taking on the language, laws, religions, norms, and behaviors of the dominant group (Berry 1998; Castro et al. 1996. For example, Smith and Guerra (2006) referred to acculturation as "the differences and changes in values and behaviors that individuals make as they gradually adopt the cultural values of the dominant society" (p. 283). Many factors, such as differences in attitudes between generations and sociopolitical trends, have influenced the conceptualization of acculturation, leaving no universally accepted definition of the term.

Adding further complexity, many other constructs in cultural research, such as assimilation, enculturation,

acculturation stress, segmented assimilation, and biculturalism, have been invoked under the umbrella of acculturation research. The term acculturation, which denotes the bidirectional process of cultural contact and adaptation, is often erroneously used interchangeably with the term assimilation, which captures unidirectional adaptations made by minority individuals to fit into the host society. Consequently, the original Redfield (Redfield et al. 1936) definition captures the bidirectional notion of acculturation, whereas the description offered by Smith and Guerra (2006) denotes the unidirectional assimilation approach. These competing unidirectional and bidirectional approaches dominate acculturation research, influencing conceptualization, measurement, analytic strategies, and results of empirical studies in this area (Cabassa 2003).

Berry (1980) characterized the course of the acculturation process as flowing from contact between dominant and nondominant cultural groups to conflict or crises between those groups that eventually results in adaptations by one or both of the conflicting groups. These acculturation phases not only characterize largescale sociological group dynamics over long periods, but also cultural interactions between social groups during different eras as well as individual psychological and social processes that affect a person's adjustment to a new cultural situation. Cultural conflict may develop gradually and extend continuously over generations, as it did for Native American people, or it may be quite abrupt and intense, such as the unsettling immersion experienced by a newly immigrated Latino or Asian child who speaks no English when he or she enters a US school for the first time. Although acculturation stages describe a sociological phenomenon that occurs between groups, a parallel interpersonal process is thought to occur among immigrant individuals and families.

Within this overarching sociological process of acculturation, several theoretical frameworks have been developed to describe what happens to individuals and families during acculturation (Lafromboise et al. 1993). These various approaches can be divided into two competing frameworks: assimilation theory and alternation theory. While proponents of these two theories agree that there are two criteria for acculturation – whether or not the acculturating individual or group retains cultural identity and whether or not

a positive relationship to the dominant society is established (Berry 1998) – they posit different views on how the acculturation process should end.

Acculturation Theories of Adaptation

Assimilation theorists say that individuals lose cultural identity in order to identify with the dominant cultural group. The assimilation model assumes that an individual sheds her or his culture of origin in an attempt to take on the values, beliefs, ways, and perceptions of the target culture (Berry 1998; Trimble 2003). The dominant culture is seen as more desirable, while the culture of origin is seen as inferior. In this model, change is directional, unilinear, nonreversible, and continuous. Assimilation theory is so pervasive that many acculturation theorists incorrectly use the terms acculturation and assimilation interchangeably (Lafromboise et al. 1993). This assimilation concept is captured by the notion of America as a "melting pot" where immigrants become "American," losing their prior culture and language in order to adapt to the host culture.

Alternation theorists, or proponents of the bicultural model, believe that individuals can both retain cultural identity and establish a positive relationship with the dominant culture. Researchers are now reconsidering linear conceptualizations of acculturation and are revisiting the original definition that allowed for dynamic bidirectional change (Trimble 2003). Alternation theorists believe that there is great value in the individual maintaining her or his culture of origin while acquiring the second culture. Thus, biculturalism, or having the ability to competently navigate within two different cultures, is the optimal end point for the process of cultural acquisition (LaFromboise et al. 1993).

In contrast to the unidirectional assimilation approach, the bidirectional approach from alternation theory considers enculturation (i.e., adoption and maintenance of behaviors, norms, values, and customs from a person's culture of origin), ethnic identity (i.e., a person's self-definition based on membership in a distinct group derived from a perceived shared heritage), and biculturalism (i.e., ability to integrate attributes of two cultures and competently navigate between cultural systems (Gonzales et al. 2002; LaFromboise et al. 1993) as important aspects of the acculturation process.

To summarize, acculturation is the overall process of contact, involvement, conflict, and change that occurs when two independent cultural systems meet. Within this large acculturation process, there are two critical dimensions to consider; the individual or families' relationship to the culture of origin and the relationship to the host culture. Bringing these two dimensions together, acculturation researchers discuss four different cultural adaptation styles (Berry 1998) that are shown in Table 1. The common notion of assimilation entails persons losing their culture-oforigin identity to identify with the dominant (host) cultural group. Integration, or biculturalism, would ensue from both retaining ethnic cultural identity and establishing a positive relationship with the dominant culture. Retaining culture-of-origin identity without establishing a positive relationship to the dominant culture would indicate rejection of the dominant culture, separation, and unwillingness to assimilate. Finally, losing cultural identity without establishing a positive relationship to the dominant culture would be the hallmark of deculturation or cultural marginality (Berry 1980; LaFromboise et al. 1993). Acculturation is the overall process of cultural involvement. Assimilation is generally associated with high levels of host culture involvement. A moderate-to-high level of involvement in both cultures marks integration or biculturalism. Separation or maintaining ethnic identity alone (enculturation) is associated with high levels of involvement in the culture of origin.

These cultural adaptation styles are important when considering the research on adolescent acculturation and health behavior. Several decades of empirical research findings lead researchers to conclude that assimilation is an important risk factor for increases in negative health behaviors and mental health problems (Amaro et al. 1990; Marks et al. 1990; Miranda et al. 2000; Vega et al. 1998). Conversely, biculturalism appears to be emerging as a protective factor that buffers acculturation stress, enhances sociocognitive

Acculturation. Table 1 Acculturation and adaptation styles

		Host culture involvement	
Culture-of-origin involvement		Low	High
	Low	Cultural marginality	Assimilation
	High	Enculturation	Biculturalism

functioning, and increases academic achievement (Feliciano 2001; Gil et al. 1994; Gomez and Fassinger 1994; Haritatos and Benet-Martinez 2002; Lang et al. 1982; Miranda and Umhoefer 1998). Each of these acculturation adaptation styles will be examined in the sections below.

Enculturation

There are several important underlying concepts within the overarching acculturation process. In contrast to acculturation, which occurs between cultural groups, enculturation is the adoption and maintenance of behaviors, norms, values, and customs from a person's culture of origin. Every culture indoctrinates children by exposing them to, or socializing them with, specific ideas, beliefs, routines, rituals, religious practices, languages, and ways of being in the world. The resulting cluster of beliefs and behaviors culminates in a person's ethnic identity. This sense of ethnic identity is a person's self-definition based on membership in a distinct group derived from a perceived shared heritage (Phinney and Ong 2007). The broad concept of enculturation encompasses the individual's level of involvement in his or her culture of origin, which is nurtured through early childhood exposure to cultural symbols and messages transmitted primarily through family interactions. By early adulthood, consistent exposure to these cultural beliefs and behaviors leads to an individual's working sense of ethnic identity (e.g., an affiliation with a cultural group and an understanding of how that cultural group expects its members to be in the world). The enculturation process both defines the characteristics of the group and secures its future by indoctrinating new members.

Retaining enculturation or culture-of-origin identity alone without establishing a positive relationship to the dominant culture would indicate *separation* and unwillingness to assimilate. The enculturation quadrant in Table 1 represents strong enculturation and low assimilation into the dominant or host society. Separation is the adaptation style that characterizes most immigrant parents who cling strongly to their culture-of-origin identity and who find the acculturation process particularly stressful.

Enculturation is an important factor in the three phases of acculturation given above. During intercultural contact, differences in enculturation between the two groups become apparent. For instance, Native Americans believed that land was a gift from the Creator, and no individual owned this gift. In contrast, the pilgrims, indoctrinated in the European currency economy and believing that they were God's chosen people, saw no difficulty in buying, trading for, or taking land for personal ownership. Differences between worldviews make groups wary of outsiders, triggering an urge to close ranks, and defend the way of life the group understands. It is easy to see how conflict may arise. With the future at stake, enculturation prompts individuals to choose *us* versus *them* – our beliefs and ways of doing things or theirs.

Assimilation

The central issue after different cultures make contact becomes who has power and control, and how will the dominant group use that power. Usually, the nondominant group is strongly influenced to take on norms, values, and behaviors espoused by the dominant group. The intensity and negativity associated with this process is largely contingent upon the receptivity of the dominant group in welcoming, respecting, or stigmatizing the nondominant group (Berry 1998). Further, the attitudes held by the dominant group influence the adoption of policies for relating to the nondominant group. For example, dominant group attitudes toward immigrants that influence policy are reflected in the debate in the USA regarding whether English should be declared the country's official language, whether school districts support English immersion or bilingual education programs, and restrictions requiring certain forms of identification that are difficult for immigrants to obtain in order to receive a driver's license.

During the conflict and adaptation phases of acculturation, antagonistic attitudes from the dominant group toward immigrants often prompt calls for assimilation or elimination. The term *acculturation*, which denotes the bidirectional process of cultural contact and change, is often erroneously used interchangeably with the term *assimilation*, which captures unidirectional adaptations made by minority individuals to conform to the dominant group.

The common notion of assimilation entails persons losing their culture-of-origin identity to identify with the dominant cultural group. That is, a movement in Table 1 from separation to assimilation, which a person completes by swapping the positive relationship with

his or her culture of origin for a positive affiliation with the dominant culture. The assimilation model assumes that an individual sheds her or his culture of origin in an attempt to take on the values, beliefs, behaviors, and perceptions of the target culture (Chun et al. 2003). The individual perceives the dominant culture as more desirable, whereas the culture of origin is seen as inferior. In this model, change is "directional, unilinear, nonreversible, and continuous" (Suarez-Orozco and Suarez-Orozco 2001, p. 8).

Assimilation theory has been applied in a range of policies and practice situations. For example, English as a Second Language (ESL) programs in which instructors speak only English and policy proposals that declare English to be the state's or country's "official" language have deep roots in assimilationist ideology. In 1998, California voters passed Proposition 227, which requires that all public school instruction be conducted in English by a wide margin (61% vs. 39%; now EC 300-340 of the California Education Code). Similarly, Arizona's voters passed Proposition 203 in 2000, which mandates school instruction must be in English and severely limits opportunity for bilingual instruction. Both propositions are examples of the assimilationist Structured English Immersion approach to educating immigrants who are not proficient in English.

In general, higher levels of assimilation are associated with negative health behaviors and mental health difficulties for both adolescents and adults (Rogler et al. 1991; Miranda et al. 2000; Smokowski et al. 2009). In comparison to their less-acculturated peers, Latinos who have become more assimilated to the host culture display higher levels of alcohol and drug use, less consumption of nutritionally balanced meals, and more psychiatric problems (Amaro et al. 1990; Marks et al. 1990; Vega et al. 1998; Alegría et al. 2008).

Most research on acculturation and adolescent health behavior has focused on youth violence and aggressive behavior. Recently, Paul Smokowski et al. (2009) conducted a comprehensive review of studies examining the relationship of Latino adolescent acculturation and youth violence. Among the studies reviewed, the association between acculturation and youth violence outcomes was examined in 16 studies; 13 of these investigations examined the perpetration of violence as the outcome, and these studies examined fear of being a victim of violence as the outcome. The results favored a significant positive association

between assimilation and youth violence. Nine of the thirteen studies reported that higher adolescent assimilation (defined in different ways by time in the USA, generational status, language use, or with multidimensional measures) was associated with increased youth violence (Buriel et al. 1982; Sommers et al. 1993; Vega et al. 1993, 1995; Brook et al. 1998; Samaniego and Gonzales 1999; Dinh et al. 2002; Bui and Thongniramol 2005; Smokowski and Bacallao 2006; Schwartz et al. 2007).

Integration

While assimilation theory continues to be popular, a growing body of research has begun to question whether it is indeed adaptive for a person to give up his or her cultural identity to fit into the dominant culture (de Anda 1984; Feliciano 2001; Suarez-Orozco and Suarez-Orozco 2001). Critics of the assimilation model usually support the further development of alternation theory, a framework that rejects linear conceptualizations of acculturation and revisits the Redfield definition of acculturation that allowed for dynamic bidirectional change (Trimble 2003). Following Table 1, integration, or biculturalism, would ensue from both retaining ethnic cultural identity and establishing a positive relationship with the dominant culture. In contrast to the unidirectional approach of assimilation, the bidirectional approach considers enculturation (i.e., adoption and maintenance of behaviors, norms, values, and customs from a person's culture of origin), ethnic identity (i.e., a person's self-definition based on membership in a distinct group derived from a perceived shared heritage), and biculturalism (i.e., ability to integrate attributes of two cultures and competently navigate between cultural systems (Gonzales et al. 2002; LaFromboise et al. 1993) as important aspects of the acculturation process.

Alternation theorists believe that individuals can both retain cultural identity and establish a positive relationship with the dominant culture. Proponents of the alternation theory of cultural acquisition assert that there is great value in the individual maintaining her or his culture of origin while acquiring the second culture (Feliciano 2001). These theorists believe that the unidirectional change approach espoused by assimilationists may have fit prior groups of white European immigrants but does not adequately characterize

adaptations made by subsequent waves of immigrants from Latin America or Asia (de Anda 1984). In this perspective, biculturalism, or having the ability to competently navigate within and between two different cultures, is the optimal end point for the process of cultural acquisition (Coleman and Gerton 1993). For the immigrant individual and her or his family, alternation theory supports the integration of cognition, attitudes, and behaviors from both the culture of origin and the culture of acquisition. This integration may result in bilingualism, cognitive code-switching, and the development of multiple identities (e.g., immigrant adolescents behaving "American" at school and "Latino" at home) to meet disparate environmental demands (Dolby 2000; Suarez-Orozco and Suarez-Orozco 2001; Trueba 2002).

Of course, the influence of the dominant or host culture plays an important role in the acculturation process. Just as assimilation ideology pushes immigrants to accept host culture norms and behaviors, environmental contexts that actively support and value multiculturalism can also prompt individuals and families toward integration or biculturalism (Berry 2001; de Anda 1984). Beginning in the 1960s, multiculturalism gained traction, prompting meltingpot metaphors to be replaced with references to a cultural salad bowl or cultural mosaic. In this newer multicultural approach, each "ingredient" retains its integrity and flavor while contributing to a successful final product. However, considering the backdrop of stress and tension, these ethnic relations are better characterized as a simmering stew than a salad bowl. In recent years, this multicultural approach has been officially promoted in traditional melting-pot societies such as Australia, Canada, and Britain, with the intent of becoming more tolerant of immigrant diversity. Meanwhile, the USA continues to vacillate between assimilation and alternation (or multicultural) approaches to immigration and ethnic relations.

Alternation theory has been used in practice, but few macro policies have been based on this framework. English as a Second Language (ESL) and Two-Way Immersion programs that teach content in both English and Spanish are underpinned by alternation theory. Bicultural skills training programs are another reflection of how alternation theory has been applied to practice (e.g., see Szapocznik et al. 1984; Bacallao and Smokowski 2005).

Research findings have linked biculturalism with more adaptive, positive mental health outcomes than either low- or high-assimilation levels. Alternation theorists believe that biculturalism is an important, positive cultural adaptation style within the acculturation process. There is research evidence for this as a hypothesis. In a study comparing low- and highassimilated Latinos, researchers found that bicultural Latinos obtained higher levels of quality of life, affect balance, and psychological adjustment (Lang et al. 1982). Miranda and Umhoefer (1998) reported bicultural individuals displayed high levels of social interest and low levels of depression. In a sample of 252 Latina undergraduate students, Gomez and Fassinger (1994) found bicultural women had wider repertoires of behavioral styles than either their low- or highacculturated peers. Other studies found that bicultural individuals have increased creativity (Carringer 1974), and greater attention control (Bialystok 1999; Bialystok et al. 2004). Benet-Martinez et al. (2006) argue that the more complex mainstream and ethnic cultural representations developed by bicultural individuals relate to their higher levels of both cultural empathy (i.e., the ability to detect and understand other's cultural habits or pressures) and cultural flexibility (i.e., the ability to quickly switch from one cultural strategy or framework to another).

Rivera-Sinclair (1997) investigated biculturalism in a sample of 254 Cuban adults. She measured biculturalism using the Bicultural Involvement Questionnaire (BIQ), and found biculturalism was related to a variety of factors, including length of time a person had lived in the USA, age, family income, education level, and general anxiety level. Her findings showed that the study participants who were more likely to report high levels of biculturalism were those individuals who had been in the USA longer, had higher incomes, and had more education. In addition, she found that younger individuals were more inclined to be bicultural than were older persons. Most important, this analysis showed that anxiety levels decreased as biculturalism levels increased.

Gil et al. (1994) found bicultural adolescents had the lowest levels of acculturation stress and were less likely to report low family pride as compared with low- and high-assimilated Latino adolescents. For these bicultural adolescents, the acculturation process did not erode levels of family pride – a dynamic that

usually takes place as adolescents become highly assimilated.

In a study with 323 Latino adolescents living in North Carolina and Arizona (Smokowski and Bacallao 2007), biculturalism was a cultural asset associated with fewer internalizing problems and higher self-esteem. Interestingly, instead of ethnic identity, it was individuals' high level of involvement in non-Latino culture (i.e., US culture) that fueled the protective effect of biculturalism. However, ethnic identity or involvement in the culture of origin is strongly related to self-esteem and familism (e.g., family cohesion). Similarly, Coatsworth et al. (2005) compared the acculturation patterns of 315 Latino youth, and found that bicultural youth reported significantly higher levels of academic competence, peer competence, and parental monitoring.

Berry et al. (2006) conducted the largest and most elaborate investigation of acculturation and adaptation in immigrant youth in a study that encompassed youth from 26 different cultural backgrounds in 13 countries. In all, 7,997 adolescents participated, including 5,366 immigrant youth and 2,631 national youth (ages 13-18 years; mean age of 15 years). These researchers were able to confirm empirically the four cultural adaptation styles discussed in this essay. Integration or biculturalism was the predominant adaptation style with 36.4% of immigrant youth fitting this profile (22.5% displayed an ethnic profile [separation], 18.7% a national or assimilation profile, and 22.4% a diffuse or marginalized profile). This bicultural way of living included reporting diverse acculturation attitudes, having both ethnic and national cultural identities, being proficient in both ethnic and national language knowledge and use, having social engagements with both ethnic and national peers, and endorsing the acceptance of both obligations to family and parents, as well as believing in adolescents' rights. This high level of biculturalism (i.e., integrative cultural adaptation style) in youth supports earlier findings with adult immigrants (Berry and Sam 1997).

In this study, Berry and colleagues (2006) found that the longer youth had lived in the new culture, the more likely they were to have a bicultural adaptation style. Further, these researchers found the integrative cultural adaptation style was associated with both positive psychological adaptation (measured by indicators of life satisfaction, self-esteem, and psychological

problems) and positive sociological adaptation (measured by school adjustment and behavioral problems). In comparison, the ethnic cultural adaptation style was linked to better psychological adaptation but worse sociological adaptation, whereas both the national and diffuse styles were associated with poor psychological and sociological adaptation. Although boys had slightly better psychological adaptation than girls, they had poorer sociocultural adaptation. These studies provide mounting evidence that psychological and social benefits are associated with being bicultural.

Deculturation

Finally, losing cultural identity without establishing a positive relationship to the dominant culture would be the hallmark of *deculturation* or cultural marginality (Berry 1980; LaFromboise et al. 1993). Less common than the other three adaptation styles, deculturation may be a stressful stage experienced by many immigrants as they construct a new or integrated cultural identity. Some authors refer to deculturation as "cultural homelessness," a state in which individuals do not feel an affiliation with any cultural group (Vivero and Jenkins 1999).

Conclusions

To summarize, acculturation is the overall process of cultural involvement. Assimilation is generally associated with high levels of host culture involvement. A moderate-to-high level of involvement in both cultures marks integration or biculturalism. Separation or maintaining ethnic identity alone (enculturation) is associated with high levels of involvement in the culture of origin, whereas having no affiliation with either culture is the hallmark of deculturation or marginalization. These four cultural adaptation styles and two major theories of cultural change (assimilation and alternation theories) capture much of the dynamic complexity within the overall acculturation process. Revisiting Berry's (1998) criteria, assimilation theory posits that a positive relationship to the dominant society is established without retention of ethnic identity, whereas in alternation theory, a moderateto-strong positive relationship to the dominant society is established and a moderate-to-strong positive relationship to ethnic identity or culture of origin is retained. Neither theory has much to say about cultural

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marginality, which occurs when a positive relationship is not formed with either the new culture or the culture of origin. Cultural marginality can result in apathy, lack of interest in culture, or the formation of a negative relationship with both cultures.

Flannery et al. (2001) conducted the earliest direct comparison of the assimilation and alternation models. In a sample of 291 Asian-Americans, they reported that both models had adequate predictive validity for use in acculturation research. They recommended using the unidirectional assimilationist model as an economical proxy measure of acculturation, and using the bidirectional alternation model for "full theoretical investigations of acculturation" (Flannery et al. 2001, p. 1035).

Turning our attention back to the conceptualizations of acculturation, alternation theory is aligned with the original Redfield definition that allows for dynamic bidirectional adaptations to occur in either or both cultures. Assimilation theory is aligned with the modified definition of acculturation that assumes unidirectional change from the dominant to the nondominant group. Assimilation and alternation theories, and the various cultural adaptation styles introduced above, are fascinating sociological constructs; however, these ideas become ever more critical when linked to health and mental health. Assimilation and alternation theories have both inspired several decades of research and knowledge development. Neither theory has been able to marshal enough empirical support to dominate the other. Rogler et al. (1991) reviewed 30 investigations to determine if consensus existed on the link between acculturation and mental health. Their review found evidence supporting each of the proposed relationships - positive, negative, and curvilinear – between acculturation and mental health. The relationship depends upon the specific mental health issue (e.g., drug use, aggressive behavior, depression, anxiety) that is under scrutiny. Research conducted after this review suggests that assimilation is an important risk factor, especially for youth violence, and biculturalism is a salient cultural asset, promoting psychological and social well-being.

Cross-References

- **▶** Assimilation
- ► Bicultural Stress
- **▶** Immigration

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Achievement Motivation

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Achievement motivation may be understood as an individual's concern for becoming successful, doing well, meeting obligations, overcoming obstacles, and attaining a sense of excellence. In the field of psychology, the concept first emerged as one of the basic needs identified in Henry Murray's (1938) groundbreaking theory of human motivation. Murray proposed that internal states of disequilibrium drive individuals' behaviors, and that disequilibrium emerges when

individuals have a sense that they lack something and a need to address it. Murray classified needs as being primary (such as those that are biologically based like the need for food, air, water) or as secondary (such as those either driven by biological needs or an individual's psychological makeup, like need for affiliation, power, recognition, autonomy). Murray conceptualized the need for achievement as a secondary need. That need has been one of the most studied, along with the need for power and affiliation, and has mushroomed into several areas of research that relate to the period of adolescence.

The study of achievement motivation initially was popularized by the Thematic Apperception Test (TAT; McClelland et al. 1953) and efforts to link the need for achievement with other characteristics and their outcomes. The TAT gives high scores to those who work well under moderate risk, seek new information, advice, and feedback. Individuals who delay gratification, who get along well with others, and also attribute their success to internal factors and failure to external factors receive high TAT scores. Although the tendency has been to view the need to achieve as a good disposition, this is not always the case, as those with a high need to achieve also have been found more likely to use illegal or deceitful means to achieve their goals (McClelland 1985). Still, studies using the TAT have been among the most fruitful as they have led to important research and theoretical developments.

Defined as an operationalization of Max Weber's protestant ethic, TAT achievement scores have been found to be less reliable for predicting achievement in certain situations (McClelland 1961). These differences essentially have revolutionized the field. For example, TAT scores are less reliable when measuring academic achievement motivation for school and more reliable for predicting frustration in political figures. In addition, TAT measures and direct measures of achievement motivation do not appear to correlate; they are associated with different actions and life outcomes. These important findings contributed to a considerable amount of research seeking to explain them. The result of that research has led researchers to conclude that the TAT measures intrinsic motivation, while direct measures look more at social rewards for achievement (see Spangler 1992) and that two distinct but related motivational systems exist: explicit and implicit achievement motivation (see McClelland et al. 1989; 46 Achievement Motivation

Thrash et al. 2007). These developments have been shown to have important implications. Notably, they reveal that different types of achievement motivations affect cognitive activities, self-regulatory strategies, and expectations for success. These differences have practical implications given how intrinsically or extrinsically motivated individuals can respond differently to different performance contexts (Story et al. 2009).

Researchers have provided other important ways to measure and understand achievement motivation. For example, Atkinson and Feather (1966) created a multivariate model that includes achievement motivation and the probability of success. This approach helped researchers to understand not only longitudinal pathways and outcomes but also the development of the theory of motivational behavior, such as separate components for approach and avoidance of achievement. Another group of researchers conceptualized achievement needs in a way that has become known as expectancy value theory, a theory developed to understand the mental calculations that take place in attitude development (Fishbein and Ajzen 1975). For example, their model views beliefs about achievement beliefs (e.g., self-perceptions of competence) and behaviors (e.g., persistence) as determined both by the expectancy youth have for success and the subjective value they place on succeeding (Wigfield and Eccles 2000).

Much research has focused on sex and cultural differences as well as developmental aspects of motivations for achievement. Historically, researchers viewed arousal and expression as differing by gender; however, comprehensive reviews have found no such pattern (Stewart and Chester 1982; Smith 1992). International studies generally have confirmed results from the USA; however, ideas of achievement differ depending on their cultural context (McClelland 1961), with achievement motivation associating with cultural differences in the perception and selection of domains, goals, and behaviors (Hofer et al. 2010). Developmentally, evidence has shown that parenting styles that train children for healthy independence - those with warmth, encouragement, and low control - cultivate high motivational achievement (McClelland 1985; Turner et al. 2009). As expected, these results do not always carry through from one study to the next, but general themes continue to gain support.

The study of achievement motivation has grown considerably given that several researchers have now offered different ways to understand it, sometimes using a variety of terms, and an increasing focus on the factors that contribute to what would be deemed achievement motivation. For example, Maehr (1984), who focused on educational contexts, hypothesized that motivation for achievement depends on the meaning that the learner creates for it, and this in turn influences how much time and energy the learner invests. For Maehr, meaning was comprised of three facets: an individual's current personal goals, that individual's sense of self, and that individual's perceptions of what could be achieved in the classroom. These three facets were proposed to be influenced by four antecedents: available information, characteristics of the learning situation, personal experience, and broader sociocultural contexts. Achievement motivation, under this approach, depends on all of these factors and, not surprisingly, all of these factors have been the subject of increasing research. Most notably, the sense of self that is now known as "self-efficacy" has received considerable interest. Self-efficacy, an individual's belief that they can perform a task, is part of understanding the self; it has been shown to be positively related to academic behaviors such as persistence, effort, cognitive strategy use, and achievement (Bandura 1997). Similarly, peer environments have been viewed as particularly important for adolescents. Belonging, peer interest in learning, and peer resistance to school norms might all be related to classroom environments. Positive associations have been shown between perceived peer investment in class activities and grades and their achievement. Acceptance and value also enhance a sense of belonging, as well as the sense that classrooms support mastery and improvement. And adolescents' social groups may promote or discourage certain behaviors, such as an achievement orientation, which could include a lack of it (Nelson and DeBacker 2008). These important lines of research confirm the complexity of this area of study and the need for research to focus on multiple factors.

The study of achievement motivation has grown considerably since it was conceptualized in the early 1900s. Although several researchers continued to use the term and have devised important measures to understand it, more recent research appears to focus more on its related components and on specific contexts of the need to achieve, such as in academic settings (see Steinmayr and Spinath 2009) and work-

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based contexts (Kenny et al. 2010). These studies highlight key points, such as the importance of families, peers, and other social environments in fostering and shaping individuals' sense of self related to the need to achieve. The fragmentation may leave an impression of a reduced interest in understanding achievement motivation, but the reality appears to be that researchers have increased their interest in it, especially in understanding its developmental roots and potential outcomes.

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Achievement Tests

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Achievement tests are evaluations that seek to measure knowledge or skills gained after training, instruction, or other experiences (Gibson and Mitchell 2008; McMillan and Schumacher 2010). These types of tests are taken by adolescents throughout their educational careers, even though they sometimes may not even realize that they are taking them. Although a wide variety of achievement tests exists, they can be grouped into categories according to their primary purpose and the scope of comparison (Whiston 2009). For example, norm-referenced achievement tests compare an individual's test score in a specific area to those of other test-takers. Criterion reference tests compare an individual's scores to a preset of knowledge or abilities. Some tests can be a mixture of both, such as some diagnostic achievement tests that are given to individuals to determine academic progress or identify strengths and weaknesses.

Efforts to measure achievement have grown, and their increase has resulted in considerable controversy. In educational environments, most notably, these tests often have become known as "high-stakes tests." These types of tests are those that can have important consequences for individuals, such as their moving to the