



GIRLS' DROPOUT EXPERIENCES

For

Women's Foundation of Colorado

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THE DROPOUT EPIDEMIC AND ITS CONSEQUENCES

National Dropouts

The United States is experiencing a “dropout crisis”. This phenomenon is usually measured by counting the number of 16-24 year olds who drop out of school. In 2006, the U.S. had a dropout rate of 9.3% (ICF International and National Dropout Prevention Center/Network 2008, 2). Most prevention efforts are focused on males because they drop out at a higher rate (10.3%) than females (8.3%) (ICF International and National Dropout Prevention Center/Network 2008, 2). Dropout rates are most dramatic among lower-income and minority students. Nationally, in 2006, Latino/Hispanic dropouts were at 22.1%, African American students at 10.7% and white students at only 5.8% (ICF International and National Dropout Prevention Center/Network 2008, 2).

The Federal government has used an annual dropout rate.¹ Based on the Federal is definition, the U.S. had an annual dropout rate of 3.9% for all high school students in grades 9-12 in the 2004-2005 school year. Males had an annual dropout rate of 4.4% and females an annual rate of 3.4%. African American students had a 6% annual dropout rate, Hispanic/Latino students a 5.8%, and white students posted a 2.8% annual rate. While the minority students each represented about 26% of the nation's annual dropouts, the white students comprised 41% of the dropout population (ICF International and National Dropouts Preventions Center/Network 2008, 5).

The National Women's Law Center (NWLC) used another measure to estimate the percentage of dropouts for the class of 2003-2004.² They estimated the number of girls who would not graduate with a regular high school diploma in the standard four-year period. Using this, the Center estimated a 25% dropout rate for girls in the class of 2007. When the overall girls' dropout group is broken down for girls of color, the estimates were that 40% of the African American, 37% of the Latina, and 18 % of the Asian/Pacific Islander (API) girls would not graduate, as compared to 22% of the white girls (National Women's Law Center 2007, 6).



While dropout rates vary depending on the measurement used, the basic story remains the same: dropout rates for males are higher than for females. Dropout rates for most minority groups are higher than for whites. Overall, about a third of all students do not graduate from high school. Graduation rates have remained fairly steady from 2002-2006, at 74% (Balfanz and West 2007).

Because dropout rates have been measured differently by states and by counties within some states, it has been difficult to make cross-state comparisons. Recently the U.S. Secretary of Education, Margaret Spellings, announced a new policy calling for all states to use common procedures and formulas to measure dropout and graduation rates. This will be in place by 2010 (ICF International and National Dropouts Preventions Center/Network 2008, 2).

While we wait for the data to become more consistent, this scientific research review asks the question, “What are the most significant factors influencing the dropout pathways of girls?”

Colorado’s Dropouts

By making use of what data we do have, it appears that dropout rates vary greatly by state. For example, the National Women’s Law Center estimated that 41% of Georgia girls in the class of 2007 would drop out of high school while only 12% of those in Utah would drop out. Colorado ranks 11th with a 22% girls’ dropout rate for the class of 2007 (National Women’s Law Center 2007, 6).

Colorado’s graduation rate has been estimated several ways. The Everyone Graduates Center at Johns Hopkins University (2009) estimated the average freshman class graduation rate for the Class of 2006 at 75.5%. Using similar methods, the Colorado Governor’s P-20 Council (2006) estimated the 2005 high school graduation rate at 70%. Using a similar data base, the Alliance for Excellent Education (2007) estimated that 74% of all students in Colorado graduate from high school with a regular diploma in four years. So the range of graduation estimates is 70%-76%.

Regardless of the method used, all of the studies identified inequities in graduation rates by race and ethnicity. In examining Colorado’s class of 2005, the Alliance for Excellent Education (2009) concluded that 80% of Asian/Pacific Islander (API) and white students graduate within 4 years; 65% of African American students; 56% of Latino/Hispanic students; and 46% of Native American students graduate from high school within four years. Latino/Hispanic, API, and Native American graduation rates for the Colorado class of 2005 were 1-5 percentage points lower than national rates for those students of color. On the other hand, the African American and white students were 2-10 percentage points higher than the national rates (Alliance for Excellent Education 2009).

In every case the national data show that more female than male students graduate. The Governor’s Colorado P-20 Council (2006) estimated there is a 6% graduation gap between boys and girls. The greatest disparities are among Latino/Hispanic and African American youth.

Cost of Dropouts

The cost of dropping out is felt on many levels. The individual dropout pays the first cost. The home community, including families and broader society, also pay a range of costs. Estimates of costs have varied over time, but the fact remains clear.

The individual pays

The individual who drops out of high school has a growing challenge to find stable employment at an adequate wage. The challenge will increase as the well-paying jobs of tomorrow will, increasingly, require a high school education at a minimum. Those without a high school diploma “will be far more likely to spend their lives periodically unemployed, on government assistance, or cycling in and out of the prison system” (Alliance for Excellent Education 2007, 1).

Nationwide, there has been a consistent annual earning gap of about \$10,000 between the high school graduate and the dropout. The average salary of a high school graduate in 2003 was \$26,200 while that of a high school dropout was \$19,000 (Donnell-Kay Foundation 2005, Endnote 7). In 2004, high school graduates earned an average annual salary of \$26,156 and high school dropouts earned an average of \$16,485 (Alliance for Excellent Education 2007, 1).

Differences in average annual earnings for 21-64 year old adults vary tremendously by gender, race, ethnicity and education, as shown below.

Table 1. Annual Earnings and Employments Rates for High School Dropouts and Graduates³

	High School Dropout		High School Graduate	
	Employed	Earns	Employed	Earns
White women	46%	\$7,800	65%	\$16,500
White men	71%	\$22,800	79%	\$33,900
African American women	46%	\$10,000	63%	\$14,200
African American men	49%	\$13,500	66%	\$21,800
Latina/Hispanic women	51%	\$9,900	57%	\$14,500
Latino/Hispanic men	70%	\$21,400	78%	\$24,000
Other women	48%	\$8,600	62%	\$15,700
Other men	71%	\$22,300	79%	\$30,100

At every level of education women earn less than men. An adult woman dropout earns about half of the male dropout’s earnings. “It is not until the average woman has had some college education that she earns more than the average man without a high school diploma” (National Women’s Law Center 2007, 9; Levin et al. 2007, 7).

There are other costs that occur to individuals who drop out of high school. They are likely to have a shorter life expectancy (Muennig 2005), more likely to be a teen parent and more likely to have poorer health than those who graduate from high school (McKinsey & Company 2009, 101; Levin et al. 2007, 9).

Because dropouts have less access to health insurance, they will not undergo preventive health screening and tend not to exercise regularly. High school dropouts are more likely to smoke, to be obese, and to drink more heavily than those with more education (National Women's Law Center 2007, 9; McKinsey & Company 2009, 101).

Communities pay

Many individual costs are absorbed by the dropout's community, state and nation through provision of support services. Family and community members often contribute child care, health care, housing support, transportation assistance, and other basic needs (Lodwick and Teske 2008).

Communities pay in "earnings lost" due to the lower incomes of their dropout population. Since each dollar of income generates more dollars through a "multiplier effect", as people use and reuse the same dollar in their exchanges, fewer income dollars yield fewer exchanges and less economic well-being in the community.

The economic growth of a community is also impaired. It will experience more difficulty attracting new business investments – especially for better paying jobs. Additionally, lower income individuals contribute fewer taxes and have less civic involvement – such as voting and volunteering – than community members with a high school degree (McKinsey & Company 2009, 103; Junn 2005; Levin et al. 2007, 9).

The State pays

The Alliance for Excellent Education (2009) reports that dropouts from the class of 2008 will cost Colorado almost \$4.3 billion dollars in lost wages over their lifetimes. Additionally, Colorado will spend over \$52.1 million for their health care over their lifetimes.

The Nation pays.

Cecilia Rouse (2005) estimated each dropout costs the nation about \$260,000 over his or her lifetime. Researchers have provided many estimates for these figures:

The United States spends between \$7.9 and \$10.8 billion annually for dropout recipients on Temporary Assistance to Needy Families, food stamps and housing assistance (Garfinkel et al. 2005).

The U.S. spends more than \$17 billion on Medicaid and other health care expenditures for uninsured dropouts (Alliance for Excellent Education 2006a).

If the male graduation rate were increased by only 5 percent, the nation would see an annual savings of \$4.9 billion in crime-related costs (Alliance for Excellent Education 2006b).

Female dropouts tend to need health support services more than males. Across all races and ethnicities, female dropouts receive a lifetime average of about \$80,550 in Medicaid and Medicare payments/services compared to \$61,625 for male dropouts (Levin et al. 2007, 12).

Levin and colleagues (2007, 16) have estimated that a female dropout costs the government about \$5,050 in lifetime welfare expenditures for Temporary Assistance for Needy Families (TANF), housing assistance, food stamps and state-based programs while male dropouts average only \$1,725 in lifetime welfare expenditures.

However, criminal behavior costs state and federal government far more for males than for females. In 2004, average criminal justice expenditures per male dropout were \$38,550 while female dropouts were at \$8,375 (Levin et al. 2007, 14).

While personal and public costs for all dropouts are great, the costs are especially steep for girls. Girls have a harder time finding employment than boys; their jobs generally provide lower earnings; they have poorer health; and, they often need to rely on public support programs for their family's basic needs. As mentioned above, however, boys are incarcerated more and generate significant costs in that area.

WHY DROPOUT? A FRAMEWORK

Developmental Stage

Adolescence is a time of tremendous change. While experiencing dramatic physical and emotional changes, adolescents must simultaneously develop new social roles and move from dependence on their families into autonomous adult roles. Key to this developmental stage, is the establishment of a vocational identity that fits their point in history (Stearns and Glennie 2006, 32) and their life context (e.g., urban, rural, and resort areas).

Stearns and Glennie (2006) found significant differences in dropout patterns by gender and ethnicity in the North Carolina public school system. Boys had the highest dropout rate in the ninth grade, while girls had fairly constant dropout rates in 9th through 11th grades, and then the girls' dropout rates fell off sharply in the 12th grade. Among the various ethnic groups studied, this pattern of highest dropouts in 9th grade and lowest in the 12th grade was repeated (31). A similar pattern was seen in Philadelphia (Neild and Balfanz 2006, 27; Hammond et al. 2007, 20).

Various paths lead to girls dropping out of school. These pathways are created through interaction of the student in the context of her family, her community, and her school. These three contexts differ, but generally include peers, family, employment opportunities, service providing organizations and others.

The types of communities considered in this review are urban, rural, and resort communities. Within each of these we focus on racial and ethnic groups. Subgroups that are sizeable in the state of Colorado are white, Latino/Hispanic, African American, Asian/Pacific Islander, and immigrant communities. Each of these has its own range of resources to support high school students. Due to differing resources and differing historical factors, the communities provide very different cultures and expectations for their youth. These community realities interact with the characteristics of the individual girls to exert "pull-out" factors that influence girls to drop out.

At the same time, the schools create “push-out” factors that reinforce the girls’ tendencies to drop out. Many of the current program efforts in Colorado, and across the nation, focus on the push-out factors operating within the schools. These factors can be more readily influenced in educational settings since the process of disengagement from school occurs over a period of years (ICF International and National Dropouts Preventions Center/Network 2008).

Pull-out and push-out factors create a conceptual framework to help interpret dropping out patterns that have been identified by so many researchers. This framework also helps identify some of the risk factors which affect girls more than boys.

Pull-out Factors

Pull-out factors assume that young people are operating within a broader community where schooling is only one important part of the adolescent’s life. Other factors, such as family, the labor market, and local organizations may present alternatives to a schooling emphasis.

Employment

The “pull” of employment may be greater when there is low unemployment and many employment options for the youth result. On the other hand, periods of high unemployment may make employment less of a pull factor for students (Hammond et al. 2007, 17).

The employment pull-out is especially strong for low income youth when they become older (17 years old, or more) than their classmates. Latino boys, white boys and white girls will tend to drop out most due to the pull-out of employment during their high school years (Stearns and Glennie 2006, 4).

The degree of pull-out power due to employment opportunities will vary in urban, rural and resort communities and within immigrant communities. For example, rural places with informal jobs like family labor on farms and in restaurants, may create more pull-out pressures than urban areas despite the cities’ greater availability of service work and formal employment options. This may also be true for resort communities.

Caregiving

Caregiving responsibilities are another form of pull-out that affects girls more than boys. Jennifer Glick and colleagues (2006) explored this in relation to educational commitment (e.g. school engagement). Researchers disagree about whether childbearing or marriage affect staying in school or whether school engagement affects parenthood. Both seem to have some influence.

School enrollment may be incompatible with family formation for several reasons. The roles of student and parent can be extremely demanding and hence difficult to maintain in tandem. Young parents need time for childcare and employment to support their new families, making it difficult to invest in schooling.

However, racial and ethnic differences have been found suggesting early family formation is less of a barrier to school completion for blacks than for non-Hispanic whites and Hispanics (Glick et al. 2006, 1392).

Past researchers have found that economic resources and the race and ethnicity of the family are important factors in creating expectations of parenthood (Brewster 1994; Stier and Tienda 1997) and education (Beutel 2000; Hockaday et al 2000; Kao 2000). They have argued that minority persons who don't expect to improve their economic status through education will not delay parenthood. Other minority group members **do** delay childbearing because they link education with better economic status (e.g., minority group status) and expect to improve their economic situation by graduating.

These differences in parenting and educational expectations also characterize different generations of immigrants. Children of immigrants may be encouraged by their immigrant parents and community to remain in school and delay childbearing in order to increase their economic resources (Espenshade and Ye 1994; Glick and White 2004). On the other hand, the third generation of immigrants, which has less contact with the original immigrant generation, will have less of a tendency to delay childbearing as they make adapt to the United States (Manlove et al. 2000; Upchurch et al. 2001).

Other forms of caregiving, such as caring for younger siblings, for sick, for elderly members of the household, and for family members with special needs haven't been as carefully researched. Some assume that the caregiving demands on Latina/Hispanic young women are greater because their Latino households tend to be larger (Stearns and Glennie 2006, 31) than those of other racial/ethnic groups. Family responsibilities were, in fact, a primary reason Latinas gave for nonparticipation in youth programs (Perkins et al. 2007, 433). Availability of economic resources and alternative caregivers will, understandably, affect the strength of these pull-out factors.

In rural areas there are fewer available jobs. This makes linking educational achievement and employment more tenuous. Those areas also have fewer support services such as child care and caregiving services than urban centers (Lodwick and Teske 2008). Therefore the caregiving pull-out may override educational motivation among older girls. In resort communities, there may be more employment opportunities and perhaps a few more child care resources. In those areas employment opportunities may counteract educational goals. And employment will probably override the caregiving and educational commitment of families for older girls. Neither of these questions has a developed research base.

Economic resources

The family's economic resources will affect the strength of the pull-out factors. Researchers have consistently found that students from low economic households/communities have a higher probability of becoming dropouts than students from households/communities with higher economics resources (Corbett et al. 2008; Hammond et al., 2006 14).

Family mobility is often a reflection of low economic resources. Kennelly and Monrad (2007) report that students who change high schools have a higher risk of dropping out. Stearns and Glennie (2006) found that family mobility affected young Latino(a) students more than anyone else.

The level of family economic resources also affects the safety factor (see below).

Family disruption

Family structure has been repeatedly found to affect parenthood. Coming from a home with one parent plus her new partner speeds early childbearing in the next generation (Wu and Thompson, 2001; Glick et al. 2006; Hammond et al. 2007, 14). This is most true among white and black students. Girls from single-mother families are more likely to have a non-marital birth, and this is significantly higher among black girls (Glick et al. 2006, 1402).

Other types of family disruptions such as divorce, illness or death contribute to increased dropout rates during middle and high school (Hammond et al. 2007, 32). Young people who were in foster care or experienced serious abuse and neglect during high school are more likely to drop out of school than other children. This was true for 71% of children experiencing abuse and neglect and 75% of those in foster care (Neild and Balfanz 2006, 33).

Family involvement in learning is critical to the success of children and youth. Families are critical in establishing the educational, career, and childbearing expectations of their youth (MacGillivray and Mann 2008 Glick et al. 2006). Mothers' educational expectations especially are linked to their daughters' graduation status (Hammond et al. 2007, 33; National Women's Law Center 2007, 10). It is clear that children are at risk of dropping out of high school if one or both parents are high school dropouts.

Justice system

Researchers have found that youth – predominantly male African Americans (Stearns and Glennie 2006) – who are incarcerated or have other run-ins with the justice system are less likely to graduate from high school (Neild and Balfanz 2006, 33). These students may obtain their GED while under care of the justice system, but they are counted as **not** having graduated on time with the rest of their classmates. They are therefore counted as dropouts (Hammond et al. 2007, 13).

Safety

Issues of community safety plague some low income communities affecting girls more strongly than boys. The girls may not feel comfortable participating in after school activities either because their parents fear for their safety or because they themselves are afraid of being bullied or harassed. Clearly, this concern increases dropout rates.

Perkins et al. (2007) explored the reasons why African American, Latino(a) and Arab or Chaldean urban youth participated in youth programs and some of the barriers to their participation. The 77 youth, 9-19 years old, participated in minority youth-serving programs.

The youth generated 344 brainstorming statements about why young people **do** participate in youth programs and 353 statements why they **do not** participate.

Four themes underlie their reasons for participating: 1) to stay off the streets and avoid dangerous situations; 2) to learn new skills; 3) to avoid boredom; and 4) to participate in enjoyable activities. Unique themes generated by the girls were:

- African American girls– prove that you can do something; talk to others about concerns; form meaningful relationships with adults
- Latinas –learn about cultures; learn about careers; be involved in the community; be accepted by peers and program staff
- Arab girls–connect with other people and the world; do something for the community; experience cultural education
- Chaldean girls– homework assistance; English literacy; safety (Perkins et al. 2007, 432)

Barriers to participation included: 1) being too busy/lack of time, 2) competing interests, 3) negative opinions of the youth center, and 4) lack of parental permission.

Specific barriers given by the girls included:

- African American girls – the programs were boring; lack of peers in the programs; peers had negative opinions of the programs
- Latinas – familial responsibilities took precedence; parents didn't want them around boys; older sibling had to accompany girls when they were out of the house and this was embarrassing; fear of peer rejection
- Arab girls - lack of confidence; fear of peer ridicule; lack of parental permission due to cultural rules, fFor example, Arab females are not permitted to participate in co-ed swimming
- Chaldean girls– safety was the central concern-- unsafe people in the neighborhood; parents concerned about interactions with boys (Perkins et al. 2007, 433-434).

Garcia-Reid (2007) examined the effects of parents', teachers' and friends' support on the degree of school engagement among Latina middle school students living in a dangerous neighborhood.⁴ This study of 133 Latinas demonstrated that teacher support was the strongest contributor to school engagement with friend support being the next most influential. However, neighborhood dangerousness was almost as strong as teacher support and it decreased school engagement.

Much of the research on pull-out factors does not specify the gender of the affected students. In Table 2, we identify the gender, race and ethnicity of the students most affected by the pull-out factors.

Table 2. Pull-out Factors by Gender and Race or Ethnicity

Factor	Girls	Boys
Adult role: Employment	1. White- 9-11 grades	1. Latino - 9-11 grades 2. White - 9-11 grades
Adult role: Parenthood or Marriage	1. Mexican-low or high school engagement, similar chance of marriage. 2. Black-low or high engagement, similar chance of parenting. 3. White-low engagement, high parenting. 4. 11 and 12 graders DO with parenting except Black. 5. 3 rd generation immigrants - higher family formation	1. Few boys engage in parenthood or marriage 2. Black-greater parenting; not affect DO.
Adult role: Caregiving	Latina-higher demands lead to greater DO for older girls	
Family disruption <ul style="list-style-type: none"> • Single parent • Divorce/stepfamily • Foster care • Abuse/neglect 	1. Black -Single parent; family formation 2. Black, white – stepfamily; family formation 3. All-foster care, abuse/neglect	1. All- foster care, abuse/neglect
Family mobility	Latina-DO in lower grades	Latino-DO in lower grades
Economic resources	All – lower resources ; DO	All – lower resources ; DO
Justice system		Black - Highest DO White, Latino - DO
Safety	Latina-less school engagement Latina, Chaldean-lower participation	

DO=drop-out

In summary, there are several “pull-out” factors that prevent youth from completing their middle or high school experiences. These pull-out factors become stronger as the students age, independent of their grade level (Stearns and Glennie 2006).

Push-out Factors

Educators have focused on the “push-out” factors in their efforts to create early warning systems (Hammond et al., 2007). These are “factors located within the school itself that negatively impact the connection adolescents make with the school’s environment and cause them to reject the context of schooling” (Jordan et al. 1996, 64). These factors influence some

students, often based on their ethnicity or gender, to see the school as an unwelcoming place (Stearns and Glennie 2006, 31).

Behavior

Schools are increasingly using indicators to identify students at-risk of dropping out. The ABC acronym is often used for these indicators (Balfanz 2008). "B" is reflected in students' behavior such as misbehavior or aggression, which are often disciplined by the school.

While this affects both boys and girls, it most strongly affects African American boys at an earlier age and continues through high school. More white boys are disciplined in 9th and 10th grades while Latino/Hispanic boys drop out due to disciplinary reasons in 10th and 11th grades. Latina/Hispanic girls have a higher rate of dropping out due to discipline in 12th grade. Students will drop out earlier if the community or family perceive the discipline to be inappropriate. Behavior factors can be identified as early as 1st grade. They are some of the main reasons middle school boys drop out (Stearns and Glennie 2006; Hammond et al. 2007, 13).

Courses (academic performance)

A second indicator is low academic performance on classwork (C). Trouble with coursework can be identified early. Failing or low grades in the core areas of math and English are especially important. This can be seen by 8th grade and affects the large dropout rates of 9th graders (Neil and Balfanz 2006; Kennelly and Monrad 2007).

White boys had their poorest academic performance in 9th and 12th grades. Black girls had lowest performance in 12th, while Latino/Hispanic boys and girls showed lower performance in the higher grades (11th and 12th) (Stearns and Glennie 2006). While girls tend to show less "low achievement or retention/over-age for grade" than boys do (Stearns and Glennie 2006), girls have a steady stream of dropouts for low achievement reasons from grades 9 to 11. The levels decrease slightly during the 12th grade (Stearns and Glennie 2006). Earning only a few credits increases the dropout rates in 10-12th grades. Additionally, grades are better predictors of dropping out than test scores (Kennelly and Monrad 2007).

Two significant risk indicators can be observed in 6th, 8th and 9th grades. In sixth grade, researchers found that more than half of the 6th graders with the following three indicators eventually left school: 1) attended school less than 80 % of the time; 2) received a poor final grade in behavior 3) and failed either math or English. In 8th grade, the same attendance and failing patterns predicted dropping out (Balfanz and Herzog 2005; Kennelly and Monrad 2007, 7).

Ninth grade is the highest dropout year in high school. If students were not promoted to 10th grade on time, this was the biggest factor for dropping out. Additionally, lower than 70% attendance, and earning fewer than 2 credits, worsened the dropout risk (Kennelly and Monrad 2007, 7).

Attendance (school engagement).

Being disciplined for undesirable behavior, low academic performance and other reasons affect students' attendance (A). Poor attendance is one indicator of weak "school engagement" (Hammond et al. 2007, 197) and one of the best predictors of course failure (Neild and Balfanz 2006). While school engagement has been defined in many different ways, Glick et al. (2006) define it as the "... entire range of characteristics from attendance through the degree of involvement among attendees" (1394). It involves levels of educational expectations, levels of effort to perform their school tasks, and participation in extracurricular activities. This is "commitment" to school (Hammond et al. 2007, 197).

African American and white girls had some of the higher levels of absenteeism in grades 9-12. Girls' absenteeism was affected by not being prepared for class as well as other reasons (Stearns and Glennie 2006).

While involvement with extracurricular activities often increased school engagement, the effects of different types of activities are mixed. Peguero (2008), for example, found that students who participated in classroom-related extracurricular activities or intramural sports were more bullied than those who participated in school team sports. As we will see in the next section, victimization experiences increase absenteeism and drop out risks.

Kaplan et al. (2007) explored Latina's attitudes toward school with 54 Latinas who attended after-school programs in the New York metropolitan area. They examined how "mother-daughter and friend mutuality, coping, acculturation, self-esteem, depression and family environment influenced" (Kaplan et al 2007, 177) school engagement⁵. They found that mother's support, friends' empathy, student's religiosity (e.g., community connection) and good grades were significant influences on school engagement. Acculturation, relationships with friends and other demographic characteristics – age, family structure, mother working outside of the home, etc. – were not significant predictors of attitude toward school (Kaplan et al. 2007, 187).

Safety

The safety factor also operates within schools. This factor includes physical and social safety. Negative peer perceptions, such as whether classmates perceive the youth as being stupid, always a problem, odd, ugly, etc. can make the school a socially unsafe place. It can also be a physically unsafe place when the student is bullied, fought with, sexually harassed, etc.

Peguero (2008) examined the effects of extracurricular activities on bullying victimization in a large national sample of 10th graders.⁶ Forty-four percent of the students reported experiencing at least one form of bullying.

He found that girls were less bullied than boys in general; Latino and African American youth were less bullied than white youth. Students with higher socioeconomic status, and who participated in classroom-related activities or intramural sports experienced greater victimization. The ones bullied most often were students who were reported for misbehavior.⁷ Those students were twice as likely to be bullied as well-behaved students. This last finding confirmed a

number of other studies on how “children’s involvement in deviance, delinquency, and misbehavior result in an increased likelihood of victimization” (Peguero 2008, 73).

Many researchers have indicated that even “minor” forms of bullying are linked to negative social, psychological, and educational outcomes, including dropping out. Safran (2007) reviewed the literature on “bullying”. This research identified two forms of bullying behavior – direct and indirect. She suggested that girls develop “alternative aggression” which is covert and more difficult to detect. This aggression has three forms:

- Relational aggression – social exclusion; threats to damage relationships and feelings of acceptance.
- Indirect aggression – the perpetrator facilitates action that does not seem to have the intention of hurting someone. She avoids confronting her victim directly.
- Social aggression – actions intended to damage self-esteem or social status of the victim in a group. For example, spreading rumors (50).

Women’s development emphasizes human relationships. Therefore the most painful attacks of bullying are inside a close friendship. Since girls are socialized away from aggression, they don’t know how to negotiate conflict in a healthy manner. They often feel that expressing their anger would end a relationship. Also, they fear isolation more than anything else (Gilligan 1993).

Like boys, girls use “assistants” to maintain their social power. They tend to make the victim suffer for weeks or even months. Tools such as the silent treatment, rumors, and blocking access are all used. The bullies often appear to be innocent as they pick on other girls who are physically or emotionally weaker than they are. Based on this review of the literature, Safran (2007) concluded that bullying prevention programs should be separated for boys and girls.

Gruber and Fineran (2007) examined the impacts of bullying and sexual harassment on middle and high school girls.⁸ Bullying is defined as aggressive behavior that occurs over time, and is characterized by an imbalance of power. Sexual harassment is persistent as well, and includes unwelcome sexual advances, requests for sexual favors or other verbal, nonverbal or physical behaviors which are sexual in nature (628).

Using factor analysis, researchers found that bullying items clustered into two primary areas – ridicule and intimidation. Sexual harassment scale clustered into public sexual harassment, which involves other people, and unwanted personal advances (Gruber and Fineran 2007, 632-633).

The researcher comparing bullying at middle and high school levels concluded: 1) the most common bullying experiences in middle school and in high school are similar, 2) the frequency of bullying and sexual harassment increases from middle school to high school, 3) boys are the most common perpetrators, especially in high school, and 4) some types of experiences are more upsetting than others at both levels. Having sexual rumors spread was the most upsetting experience (Gruber and Fineran 2007, 634).

The impacts of bullying were much stronger on girls during middle school than during high school. Gruber and Fineran (2007) found poorer health outcomes on self-esteem, mental health, physical health, life satisfaction and substance abuse for those who were bullied compared to those not bullied (637). Sexual harassment was also related to poorer health outcomes at both levels of schooling. However, sexual harassment had a more significant impact on health outcomes for high school girls than bullying did (638).

Next, Gruber and Fineran (2008) compared the impact of bullying and sexual harassment, refining their measures to be comparable in time (e.g., this school year), and using the same health measures outcomes as in their previous work. They consolidated the middle school and high school samples because the bullying and sexual harassment experiences were not significantly different. They found that 52.3% of the sample (298 boys and 224 girls) had experienced bullying and 35.3% had experienced sexually harassment (6).

Slightly more boys (53%) experienced bullying than girls (51%) and slightly more girls (36%) experienced sexual harassment than boys (34%). These differences were not statistically significant, but significant differences were found between heterosexual students (bullying 50% and harassment 32%) and GLBQ students (bullying 79% and harassment, 71%) (Gruber and Fineran 2008). They concluded that “girls experience a broader range of adverse health effects (8 out of 10) from bullying and sexual harassment than boys do (4 out of 10). GLBQ students experienced negative health outcomes (4 of the 10) which were all related to sexual harassment. Overall, sexual harassment caused more harm than bullying (Gruber and Fineran 2008, 10).

These studies are important in relation to dropping out because both bullying and sexual harassment can increase absenteeism, leading to poor grades then to dropping out. Hoover et al. (1992) reported that 90% of bullied victims suffered lowering of school grades. Kochenderfer and Ladd (1996) also found that victimization related to absenteeism and attrition (reported in Gruber and Fineran 2008, 4).

Other studies have recorded the effects of sexual harassment on absenteeism, lower quality of schoolwork, skipping or dropping classes, poor grades, tardiness, and truancy (AAUW 2001; Hand and Sanchez 2000; Lee et al. 1996).

Many of the push-out factors are identified only as they impact the general student body. In Table 3 we identify how the factors affect boys and girls with different backgrounds and as they relate to increasing dropout risk.

Table 3. Push-out Factors by Gender and Race or Ethnicity

Factor	Girls	Boys
Behavior/discipline <ul style="list-style-type: none"> • Failing behavior grade • Suspension, expulsion 	1. Latina - 12 th	1. Black - 9-12 th highest 2. White - 9 th & 10 th 3. Latino - 10 th & 11 th
Academic performance <ul style="list-style-type: none"> • Fail core courses • Few credits earned 	1. Latina - 11 th 2. Black - 12 th	1. White - 9-12 th highest 2. Latino - 11 th & 12 th
School engagement <ul style="list-style-type: none"> • Absenteeism • Prepared for class 	1. Black and white - similar absenteeism 9-12 th 2. All - greater disengagement if not prepared for class	
Safety <ul style="list-style-type: none"> • Bullying • Sexual harassment 	1. All-weaker ones; high economic background 2. All-affected health 3. All-sexual harassment stronger than bullying 4. GLBQ - sexual harassment victims	1. White – bully victims 2. GLBQ - sexual harassment victims 3. All-misbehaving students victims 4. All – weaker ones; high economic background

DO = drop-out

The impacts of these factors may be lessened in rural communities where teachers know students/families better than in urban areas. For whatever reason, dropout rates in rural communities are lower than in urban areas (Hammond et al. 2007, 16).

This mitigating teacher relationship may be less strong in resort communities where many seasonal immigrants work. There, students may have a higher risk of dropping out, but there is no research on dropouts in resort communities yet.

CONCLUSIONS

There is ongoing concern about the country’s low rate of high school graduations as we enter the 21st century. Compared with other countries, American performance is poor. In 2005, the U.S. ranked 21st in a list of OECD countries, at a graduation rate of 76%, while the average graduation rate among those countries was 82% (McKinsey & Company 2009, 5).

U.S. and Colorado

National graduation and dropout information has been difficult to study because of the different approaches the states have taken to measure their rates. Colorado has been particularly confusing because of its non-standardized county-based measures. There is a federal effort in place to standardize measures by 2010. In Colorado, we started this change in 2005. According to the data available to date, graduation rates for the nation have hovered around 74% over the past ten years. Colorado’s graduation rates have varied between 70-76%.

About 30% of high school students do not graduate both across the nation and in Colorado. This is generally worse among youth of color. Nationally and statewide, Asian/Pacific Islander and white youth have had the highest graduation rates. African American, Latino/Hispanic and Native American youth have lower graduation rates.

In Colorado, Latino/Hispanic (56%) and Native American (46%) students have the lowest graduation rates-- lower than national figures. On the other hand, Colorado African American students have a higher graduation rate (65%) than nationally. Both at the national and at the state levels, girls' graduation rates are higher than boys'.

Costs

A youth who drops out of high school pays a high cost personally, as does the community, state and nation. Dropouts hold less stable, lower paying jobs compared to high school graduates. They have poorer health, greater incarceration rates, and need additional support for their families.

Women at every level of education earn less than men do. Female dropouts earn only about 50% of what a male dropout earns. On average it takes women some amount of college education to earn slightly more than a man who has dropped out. Women's earnings are not tied as closely to their education level men's.⁹¹⁰ Communities suffer significantly from the lower earnings and lower taxes of women.

Communities also lose the ability to attract high-paying jobs when they have greater numbers of dropouts in their high schools. They also lose community volunteers and other civic contributors due to their dropout population. Households are also drained by demands made on them by dropouts.

Colorado will lose about \$4.3 billion in taxes and multiplier effects from the reduced earnings of dropouts from the Class of 2008. Additionally, the state will pay more than \$52.1 million in health benefits over the lifetime of the dropouts from the high school class of 2008 alone!

In 2005, the nation incurred about \$260,000 per lifetime for each high school dropout in welfare, health care and incarceration expenditures. Generally, female dropouts need more for health and welfare while male dropouts need more for the justice system and incarceration.

An Interpretive Framework: Pull-out and Push-out Factors

There are different pathways which develop over many years leading to the point where students drop out of school. These pathways are created through the interaction of pull-out and push-out factors influencing the decisions that the youth make about their commitment to graduate or not .

One of the central questions of this literature review is: "What factors tend to affect girls more than boys in creating dropout pathways?" Since much of the scientific research literature does not separate boys and girls, the differences are not always clear. In addition, the literature is

very heavily oriented to urban areas, leaving the stories of rural and resort areas mostly untold. We can, however, use known findings to suggest other logical conclusions, in order to explore these questions.

Pull-out Factors

Pull-out factors that are found in the research literature include employment, caregiving, economic resources, family disruption, the justice system, and safety concerns. Low economic resources are one of the strongest consistent pull-out factors that incline boys and girls to drop-out before receiving a high school diploma. White boys and girls as well as Latino/Hispanic boys will be pulled-out by employment opportunities more than other groups of students from 9th through 11th grades. As the youth get older, there may be increased social pressure to help generate income for their families or themselves.

The adult roles of caregiving, parenting and marriage affect girls more than boys. Latina/Hispanic girls are especially pulled-out by this factor. White girls are the next most affected. Although African American girls are influenced by these adult roles, they are less likely to drop out of school because of adult role demands.

Family disruption and mobility are factors that affect both boys and girls. Abuse, single parented households, and stepfamily formation during middle and high school seem to affect girls more strongly than boys. Family mobility affects young Latino/Hispanic boys and girls more than any other group.

Safety of the neighborhood seems to affect Latina/Hispanic girls, primarily, along with some immigrant girls. The literature on this is fairly sparse.

Involvement with the justice system, or incarceration, affects boys more than girls, and especially African American boys. Legal involvement is closely linked to dropping out of high school. There is little information about GED completion by youth confined by the justice system.

Push-out Factors

Push-out factors are experienced within the school itself, making the school appear inhospitable to some youth. These factors are more easily influenced by educators than the pull-out factors. They include behavior, school discipline, coursework and other academic performance measures, attendance, school engagement, and safety in school. All of these factors have been clearly identified by research except for the safety issue.

Both behavior and academic performance can be identified very early-- as early as 1st grade. While both boys and girls are influenced by behavior problems and school discipline, boys' dropouts are most strongly affected. This is especially true for African American boys. The relationship between dropping out and behavior factors is strongest in middle school.

Both boys and girls are affected by their academic performance. While girls tend to drop out less due to weak academic performance than boys do, there is a steady stream of girl

dropouts for this reason. White boys drop out for low academic performance more than any other group of boys. Latino/Hispanic boys and girls drop out in the higher grade levels due to low academic achievement, as do African American girls. This may be related to becoming older than their classmates due to retention at the same grade level.

Girls express their lack of school engagement by their rates of absenteeism. This is especially true of African American and white girls. Girls, more than boys, report they missed class because they weren't prepared. Over time this may be an indication of the ways that caregiver roles in the home lead to girls' declining school engagement and, ultimately, to dropping out.

Finally, safety in school affects both boys and girls. Bullying victimization affects boys more than girls, misbehaving students more, and those who are perceived to be weaker and of higher economic background. Sexual harassment occurs less often, but has stronger impacts on high school girls' health than bullying. GLBQ students also have high rates of sexual harassment victimization. While research is growing in the area of school safety, more focus is needed on the ways that girls bully others. Most of the literature examines male bullying patterns.

Overall, the following pull-out factors affect girls more than boys:

- Adult roles of caregiving, marriage, parenting which conflict with being a student
- Family stress, especially abuse, divorce, illness, death and stepfamily formation
- Family structures of single mother homes or homes where either parent dropped out
- Safety of the neighborhood

The push-out factors that most affect girls are:

- Absenteeism or lack of school engagement
- Safety, especially sexual harassment.

The strength of these factors varies by racial and ethnic background as well as gender. They also must be examined within specific contexts. Even within urban communities and schools, the mix of factors may differ. Rural and resort areas need to be carefully researched since there is so little information available about how the pull-out and push-out factors operate in those contexts.

¹ The U.S. Department of Education’s National Center for Education Statistics (NCESA) defines a dropout as:

An individual enrolled in school the previous year who did not return at the start of the current school year and who has not graduated high school, transferred to another public or private school, temporarily absent due to suspension or illness; or has died (ICF International and National Dropout Prevention Center/Network 2008, 3).

² They used the EPE Research Center’s estimated graduation rate for females of 72.7% and multiplied it by the number of females in 9th grade in 2003-2004 (National Women’s Law Center 2007, 20).

³ (Levin et al. 2007, 7). These figures are not adjusted for incarceration, which affects African American men more strongly than other groups.

⁴ School engagement was defined as the students’ commitment to the school process and was measured using a subscale of the School Success Profile (SSP) developed by Bowen and Richman (1997). The “neighborhood dangerousness” was measured by the youth’s perceptions that there were youth who “get into trouble with the police” or “join a gang” in her neighborhood (Garcia-Reid 2007, 171).

⁵ Mutuality was defined “as a pattern of thoughts and exchanges in relationship that are characterized by understanding, interest and responsiveness” (Kaplan et al. 2007, 176).

⁶ Peguero (2008) defined bullying victimization as being threatened to be hurt, being hit, forceful methods being used to get things from the victim, being picked on, being stolen from, or belongings being damaged or destroyed.

⁷ Misbehavior was measured as self-reports of having cut or skipped classes and getting into trouble for not following school rules (Peguero 2008).

⁸ The characteristics of bullying included aggression (e.g., behavior that is intended to harm or disturb the victim. It occurs over time, and there is an imbalance of power. Sexual harassment is also persistent and includes unwelcome sexual advances, requests for sexual favors or other verbal, nonverbal or physical behavior which are sexual in nature (Gruber and Fineran 2008, 628).

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