

## Chapter 11

### RISK AND PROTECTIVE FACTORS

Over the years, the primary objective of the *Hawaii Student Alcohol, Tobacco, and Other Drug Use Study* has been to ascertain substance use prevalence and trends among students in grades 6, 8, 10, and 12 in the State of Hawaii. The 2003 *Hawaii Student Alcohol, Tobacco, and Other Drug Use Study* continued to monitor substance use prevalence and trends, but was also designed to assess risk and protective factors that predict substance use among Hawaii students in grades 6 through 12. The prevention needs assessment approach, first begun in 2000, highlights variables related to substance use and provides a framework for implementing and evaluating statewide prevention efforts.

This chapter is organized under three sections: (1) description of the risk and protective factor framework, (2) the relationship of risk and protective factors with substance use and antisocial behaviors (ASBs), and (3) subgroup profiles based on risk and protective factors. Subgroup comparisons are made for school type (public versus private), place of residence (City & County of Honolulu, Hawaii County, Kauai County, and Maui County), public school district (Honolulu, Central, Leeward, Windward, Hawaii, Kauai, and Maui Districts), sex (male and female), and ethnic background (Chinese, Filipino, Japanese, Native Hawaiian, and White). Each subgroup is compared to statewide proportions on each individual risk and protective factor in an effort to highlight factors that should be the focus of drug prevention efforts in various communities. Additionally, each subgroup within a category is compared to the others to illustrate factors that differentiate subgroups and to help explain high or low substance use rates in various communities. Changes from 2002 to 2003 are addressed briefly at the end of each major section. To assist in highlighting subgroup differences, grade-level comparisons at the subgroup level are not addressed. Rather, estimates for each risk and protective factor are weighted by grade for each subgroup.

Grade-level comparisons for each subgroup are found in profile reports made available on the State of Hawaii Department of Health's web site ([www.hawaii.gov/health/substance-abuse/prevention-treatment/survey/report2003](http://www.hawaii.gov/health/substance-abuse/prevention-treatment/survey/report2003)).

### RISK AND PROTECTIVE FACTOR FRAMEWORK

For more than a decade, the *Hawaii Student Alcohol, Tobacco, and Other Drug Use Study* has addressed two central factors that are presumed to be related to substance use: Adolescent attitudes and beliefs related to alcohol and drugs (see Chapter 8), and exposure to substance use (see Chapter 9). However, neither substance use nor substance abuse can be accounted for by just a few etiological factors (Newcomb & Felix-Ortiz, 1992). Recent approaches to adolescent substance use have turned to the role of risk and protective factors in the domains of community, family, school, and peer-individual to explain substance use initiation and continuation (Arthur, Hawkins, Pollard, Catalano, & Baglioni, 2002; Arthur, Glaser, & Hawkins, 2003; Herrenkohl, Hawkins, Chung, Hill, & Battin-Pearson, 2000; Newcomb, 1995). The risk and protective factor framework attempts to address measurable risk factors, which are precursors for drug and alcohol problems, and measurable protective factors, which "moderate or buffer" the impact of risk factors by improving coping, adaptation, and competence.

## **Risk versus Protective Factors**

Risk factors are characteristics of community, family, and school environments, as well as characteristics of students and their peer groups, that are known to predict increased likelihood of drug use, delinquency, and violent behaviors among youths (Brewer, Hawkins, Catalano, & Neckerman, 1995; Hawkins, Arthur, & Catalano, 1995). For example, researchers have found that children who live in disorganized, crime-ridden neighborhoods are more likely to become involved in crime and drug use than children who live in safe neighborhoods. Risk factors included in the present study are based on recommendations from the Center for Substance Abuse Prevention (CSAP) and fall into four different domains: (1) community, (2) family, (3) school, and (4) peer-individual.

Protective factors exert a positive influence or buffer against the negative influence of risk, thus reducing the likelihood that adolescents will engage in problem behaviors. Protective factors identified through research reviewed by Hawkins and Catalano include social bonding to family, school, community, and peers; healthy beliefs and clear standards for behavior; and individual characteristics. For bonding to serve as a protective influence, it must occur through involvement with peers and adults who communicate healthy values and set clear standards for behavior. Similar to risk factors, protective factors addressed in the present study are based on recommendations from CSAP and relate to the community, family, school, and peer-individual domains.

## **Community Profiles and Prevention Planning**

Research on risk and protective factors has important implications for prevention efforts. The premise of the risk and protective factor approach is that, in order to promote positive youth development and prevent problem behaviors, factors that predict the problem behaviors must be addressed. By measuring risk and protective factors in various populations, prevention programs can be implemented that reduce elevated risk factors and promote protective factors. For example, if the perceived availability of substances is identified as an elevated risk factor in a community, then law enforcement personnel need to intercede and more stringently enforce the laws regarding tobacco and alcohol sales in that community. Also, neighborhood members and school personnel must develop policies to help prevent the sale of illegal substances in their neighborhood. Prevention efforts that address all of the risk and protective factors are sure to have a positive effect on substance use prevention. However, cost and efficiency issues preclude prevention planners from covering all factors. The risk and protective factor approach addressed in this chapter develops community profiles that highlight elevated risk factors and low protective factors for various subgroups. These community profiles allow individuals to strategically prioritize prevention efforts around the most critical set of risk and protective factors in their community.

Community profiles in this chapter are developed so that comparisons can be made to statewide proportions and across subgroups (e.g., across each of the seven districts). Each year, the statewide proportions are used as the primary comparison base to determine which risk and protective factors should be prioritized in prevention efforts directed at a particular subgroup. Prevention efforts should move towards reversing or reducing elevated risk factors or enhancing low protective factors. Thus, prevention efforts for each subgroup should focus on risk factors that are above the statewide sample, and protective factors that are below the statewide sample. Comparisons can also be made across subgroups to increase our understanding of why certain subgroups have higher substance use and delinquency rates.

For instance, Chapter 4 and Chapter 6 revealed that Native Hawaiian and White students have higher prevalence rates and greater treatment needs than students from other ethnic groups. Comparing risk and protective factor profiles for different ethnic groups can help shed light on factors that increase substance use vulnerability in various ethnic populations.

Unique to the risk/protective factor approach is the belief that no single predictor can account for large proportions of variance in substance use. Rather, adolescents' vulnerability to the use and abuse of various substances is a function of the accumulation of multiple risk factors (Newcomb, 1995). Protective factors, like risk factors, are also presumed to operate in a multiplicative manner. Specifically, no single protective factor prevents substance use and abuse; rather, the accumulation of multiple protective factors protects an individual from using or abusing substances. Risk and protective factor indexes were created by adding up the number of risk and protective factors to which the individual is exposed. The more risk factors to which an individual is exposed, the greater the likelihood that he or she will use or abuse substances. The more protective factors to which an individual is exposed, the greater the likelihood that he or she will be protected from the possibility of using or abusing substances. Subgroups exposed to a large number of risk factors and a low number of protective factors are in greatest need of prevention programs. Thus, comparing subgroups on the risk and protective factor indexes can highlight communities with the greatest need for prevention resources.

Twenty-four risk factors were used to create the risk factor index. These factors were (1) community disorganization, (2) transition and mobility, (3) exposure to community alcohol, tobacco, and drug (ATOD) use, (4) laws and norms favorable to drug use, (5) perceived availability of drugs and handguns, (6) ability to purchase alcohol or tobacco, (7) poor family supervision, (8) lack of parental sanctions for antisocial behaviors (ASBs), (9) parental attitudes favorable toward ATOD use, (10) exposure to family ATOD use, (11) parental attitudes favorable toward ASB, (12) family (sibling) history of ASB, (13) low school commitment, (14) poor academic performance, (15) early initiation of problem behaviors, (16) favorable attitudes toward ATOD use, (17) low perceived ATOD use risk, (18) antisocial behaviors (ASBs), (19) favorable attitudes toward ASB, (20) friends' ATOD use, (21) interaction with antisocial peers, (22) rewards for antisocial involvement, (23) rebelliousness, and (24) sensation seeking.

Ten protective factors were used to create the protective factor index. These factors were (1) community opportunities for positive involvement, (2) community rewards for positive involvement, (3) family attachment, (4) family opportunities for positive involvement, (5) family rewards for positive involvement, (6) school opportunities for positive involvement, (7) school rewards for positive involvement, (8) peer disapproval of ATOD use, (9) belief in the moral order, and (10) educational aspirations.

Table 65 describes each of the risk and protective factors addressed in the community, family, school, and peer-individual domains. Refer to Chapter 3 for descriptive statistics for each scale, as well as for a list of the items from the *2003 Hawaii Student Alcohol, Tobacco, and Other Drug Use Survey* that were used to create each scale. As addressed in Chapter 3, the scales used in the 2003 survey effort correspond to the scales used in 2000 and 2002.

**TABLE 65  
Risk and Protective Factor Definitions**

<b>Community Domain</b>	<b>Risk Factors</b>	
	<b>Community Disorganization</b>	Defined as the prevalence of crime, violence, and delinquency in the neighborhood. Research has shown that neighborhoods with high population density, lack of public surveillance, physical deterioration, and high rates of adult crime also have higher rates of juvenile crime and drug selling.
	<b>Transition &amp; Mobility</b>	Defined as amount of movement from one community or school to another. Neighborhoods with high rates of residential mobility have been shown to have higher rates of juvenile crime and drug selling, while children who experience frequent residential moves and stressful life transitions have been shown to have higher risk for school failure, delinquency, and drug use.
	<b>Exposure to Community Alcohol, Tobacco, and Other Drug (ATOD) Use</b>	Defined as frequent exposure to alcohol, tobacco, and other drug (ATOD) use by people in one's neighborhood or school. Frequent exposure to ATOD use influences normative beliefs and understanding of how to engage in the behavior and, thus, increases likelihood of ATOD use.
	<b>Laws &amp; Norms Favorable to Drug Use</b>	Defined as the attitudes and policies a community holds about drug use and crime. Research has shown that legal restrictions on alcohol and tobacco use, such as raising the legal drinking age, restricting smoking in public places, and increasing taxation, have been followed by decreases in consumption. Moreover, national surveys of high school seniors have shown that shifts in normative attitudes toward drug use have preceded changes in prevalence of use.
	<b>Perceived Availability of Drugs &amp; Handguns</b>	Defined as the perceived ease in obtaining drugs and firearms for adolescents. The availability of cigarettes, alcohol, marijuana, and other illegal drugs has been related to the use of these substances by adolescents. Availability of handguns is also related to a higher risk of crime by adolescents.
	<b>Ability to Purchase Alcohol or Tobacco</b>	Defined as whether or not a student has been able to purchase alcohol and/or tobacco from a store employee, a bar, or a restaurant. Corresponding with perceived availability, opportunities to purchase alcohol and tobacco have been related to use of these substances by adolescents.
	<b>Protective Factors</b>	
	<b>Community Opportunities for Positive Involvement</b>	Defined as opportunities to engage in prosocial activities in the community, such as sports or adult-supervised clubs. When opportunities are available in a community for positive participation, children are less likely to engage in substance use and other problem behaviors.
<b>Community Rewards for Positive Involvement</b>	Defined as community encouragement for adolescents engaging in positive activities. Rewards for positive participation in activities help children bond to the community, thus lowering their risk for substance use.	
<b>Family Domain</b>	<b>Risk Factors</b>	
	<b>Poor Family Supervision</b>	Defined as a lack of clear expectations for behavior and a failure of parents to monitor their children. Parents' failure to provide clear expectations and to monitor their children's behavior makes it more likely that their children will engage in drug use, whether or not there are family drug problems.
	<b>Lack of Parental Sanctions for Antisocial Behaviors (ASBs)</b>	Defined as a low probability that parents will sanction their children for substance use, skipping school, and handgun use. Parents' failure to clearly communicate to their children that their children would be in trouble if caught using substances or engaging in antisocial behaviors places children at higher risk for substance use.
	<b>Parental Attitudes Favorable Toward ATOD Use</b>	Defined as parental attitudes approving of young people's ATOD use. In families where parents are tolerant of children's use, children are more likely to become drug abusers during adolescence.
	<b>Exposure to Family ATOD Use</b>	Defined as a high degree of exposure to parents' ATOD use. In families where parents use illegal drugs or are heavy users of alcohol, children are more likely to become drug abusers during adolescence. The risk is further increased if parents involve children in their own substance-using behavior – for example, asking the child to light the parent's cigarette or to get the parent a beer from the refrigerator.
	<b>Parental Attitudes Favorable Toward ASB</b>	Defined as parental attitudes excusing children for breaking laws. In families where parents are tolerant of antisocial behavior, children are more likely to engage in antisocial behavior.
	<b>Family (Sibling) History of ASB</b>	Defined as high ASB prevalence among brothers and sisters. When children are raised in a family with a history of problem behaviors, the children are more likely to engage in these behaviors.
	<b>Protective Factors</b>	
	<b>Family Attachment</b>	Defined as feeling connected to and loved by one's family. Young people who feel that they are a valued part of their family are less likely to engage in substance use and other problem behaviors.
<b>Family Opportunities for Positive Involvement</b>	Defined as opportunities for positive social interaction with parents. Young people who are exposed to more opportunities to participate meaningfully in the responsibilities and activities of the family are less likely to engage in drug use and other problem behaviors.	
<b>Family Rewards for Positive Involvement</b>	Defined as positive experiences with parental figures. When family members praise, encourage, and attend to their children's accomplishments, children are less likely to engage in substance use and ASB.	

(Table continued on next page)

**TABLE 65 (continued)**  
**Risk and Protective Factor Definitions**

<b>School Domain</b>	<b>Risk Factors</b>	
	<b>Low School Commitment</b>	Defined as the student's inability to see the role of a student as a viable one. Factors such as disliking school and perceiving the course work as irrelevant are positively related to drug use.
	<b>Poor Academic Performance</b>	Defined as poor performance in school. Beginning in the late elementary grades (grades 4-6), academic failure increases the risk of drug abuse and delinquency.
	<b>Protective Factors</b>	
	<b>School Opportunities for Positive Involvement</b>	Defined as opportunities to become involved in school activities. When young people are given more opportunities to participate meaningfully in important activities at school, they are less likely to engage in drug use or problem behaviors.
	<b>School Rewards for Positive Involvement</b>	Defined as positive feedback by school personnel for student achievement. When young people are recognized and rewarded for their contributions at school, they are less likely to be involved in substance use and other problem behaviors.
<b>Peer-Individual Domain</b>	<b>Risk Factors</b>	
	<b>Early Initiation of Problem Behaviors</b>	Defined as early substance use and early onset of problem behaviors. The earlier the onset of any drug use, the greater the involvement in other drug use. Onset of drug use prior to the age of 15 is a consistent predictor of drug abuse; later age of onset of drug use has been shown to predict lower drug involvement and a greater probability of discontinuation of use.
	<b>Favorable Attitudes Toward ATOD Use</b>	Defined as perceptions that it is not wrong for young people to engage in ATOD use. Initiation of use of any substance is preceded by values favorable to its use. During the elementary school years, most children express anti-drug, anti-crime, and prosocial attitudes and have difficulty imagining why people use drugs. However, in middle school, as more youths are exposed to others who use drugs, their attitudes often shift toward greater acceptance of these behaviors. Youths who express positive attitudes toward drug use are at higher risk for subsequent drug use.
	<b>Low Perceived ATOD Use Risk</b>	Defined as perceived harmfulness associated with ATOD use. Young people who do not perceive drug use to be risky are far more likely to engage in drug use.
	<b>Antisocial Behaviors (ASBs)</b>	Defined as engaging in problem behaviors such as violence and delinquency.
	<b>Favorable Attitudes Toward ASB</b>	Defined as a student's acceptance of drug use, criminal activity, violent behavior, or ignorance of rules. Young people who accept or condone antisocial behavior are more likely to engage in a variety of problem behaviors, including drug use.
	<b>Friends' ATOD Use</b>	Defined as having several close friends who engage in ATOD use. Peer drug use has consistently been found to be among the strongest predictors of substance use among youths – even when young people come from well-managed families and do not experience other risk factors.
	<b>Interaction with Antisocial Peers</b>	Defined as having several close friends who engage in problem behaviors. Young people who associate with peers who engage in problem behaviors are at higher risk for engaging in antisocial behavior themselves.
	<b>Rewards for Antisocial Involvement</b>	Defined as having friends who approve of ATOD use and who are ignorant of laws and rules. Young people who receive rewards for their ASB are at higher risk for engaging further in ASB and ATOD use.
	<b>Rebelliousness</b>	Defined as not being bound by rules and taking an active rebellious stance toward society. Young people who do not feel like part of society, are not bound by rules, do not believe in trying to be successful or responsible, or who take an active rebellious stance toward society, are at higher risk of abusing drugs.
	<b>Sensation Seeking</b>	Defined as having a high need for sensation or arousal experiences. Young people with a high need for arousal have increased risk for participating in ATOD use and other problem behaviors.
	<b>Protective Factors</b>	
	<b>Peer Disapproval of ATOD Use</b>	Defined as student perceptions that his or her close friends would disapprove of him or her using substances. Peer pressure is a strong factor influencing adolescent behavior, and peer pressure not to use alcohol, tobacco, and other drugs is a very powerful deterrent.
	<b>Belief in the Moral Order</b>	Defined as beliefs that one is bound by societal rules. Young people who have a belief in what is "right" and "wrong" are less likely to use drugs.
	<b>Educational Aspirations</b>	Defined as aspirations for continuing on to and graduating from college. National surveys of high school seniors have shown that ATOD use is significantly lower among students who expect to attend and graduate from college than among those who do not.

## VALIDITY TEST OF RISK AND PROTECTIVE FACTORS

Vulnerability to substance use and delinquency increases with an increasing number of risk factors and decreases with an increasing number of protective factors. Given this assumption, the risk factor index should be positively correlated with substance use, substance abuse, and antisocial behaviors (ASBs), whereas the protective factor index should be negatively correlated with substance use, substance abuse, and ASBs. In sum, as the number of risk factors increases, the likelihood of using or abusing substances and engaging in ASBs increases; as the number of protective factors increases, the likelihood of using or abusing substances and engaging in ASBs decreases.

Although each factor is believed to account for less variance than the sum of all factors, individual risk factors should be positively correlated to substance use, substance abuse, and antisocial behavior (ASB), whereas individual protective factors should be negatively correlated with substance use, substance abuse, and ASB. An examination of the relationships of individual risk and protective factors with substance use sheds light on factors that are most influential. One important caveat should be made regarding the utility of statistical correlations based on variables that are measured at the same point in time. Some risk and protective factors may influence substance use years down the line. Thus, the relationships between the risk or protective factors and current substance use might be, in some instances, quite small or non-significant. All of the risk and protective factors included in this study have been shown by other researchers to predict *future* substance use and adolescent delinquency. That is, all of the factors were previously tested over time, and each were determined to significantly predict substance use that occurs after being exposed to various risk and protective factors. Correlations in the present study provide further evidence that each factor is statistically related to substance use.

### ***Predictor and Outcome Variables***

The predictive utility of risk and protective factor indexes, and individual risk and protective factors were examined by correlating each index and factor with the following outcome variables of interest: (1) number of drugs used in a student's lifetime, (2) number of drugs used in the past 30 days, (3) frequency of monthly cigarette use, (4) frequency of monthly alcohol use, (5) frequency of monthly marijuana use, (6) substance abuse based on the DSM-III-R criteria, (7) having been drunk at school, (8) having been suspended from school, (9) having attacked someone with intention of harm, (10) having sold illegal drugs, and (11) having been arrested.

**Predictor Variables.** Each individual risk and protective factor is described in Table 65. To create the risk and protective factor indexes, each of the risk and protective factors were scored 1 (*the risk or protective criterion was met*) or 0 (*the criterion was not met*). This allowed the individual items to be summed for their respective index. Refer to Chapter 3 for a discussion of the analytical procedures used to determine the cutpoints to create the dichotomous variables. Although the risk and protective factors were dichotomized to create the indexes, correlations reported in Table 66 regarding individual risk and protective factors are based on the factors as continuous measures.

**Outcome Variables.** Number of drugs used in a student's lifetime is a continuous measure related to the number of illicit drugs (ranging from 0 to 12) that a student has tried in his or her lifetime. Number of drugs used in the past 30 days is a continuous measure related to the number of illicit drugs that a student

has used in the previous 30 days, ranging from 0-12. Frequency of monthly cigarette use, monthly alcohol use, and monthly marijuana use were each 1-item, 6-point scales that asked how many days the student has used the substance. Answer alternatives were (1) *none*, (2) *1-2 days*, (3) *3-5 days*, (4) *6-9 days*, (5) *10-19 days*, and (6) *20 or more days*. Substance abuse is a dichotomous variable (1=*abuser*; 0=*nonabuser*) created by applying the DSM-III-R criteria described in Chapter 6. Students who meet an abuse or dependency diagnosis for either alcohol or illicit drugs are classified as abusers, and all other students are classified as nonabusers. Drunk at school, suspended from school, attacked someone, sold illegal drugs, and arrested were each 1-item, 7-point scales that asked how many times in the past year or 12 months the student had engaged in the various ASBs. Answer alternatives were (1) *never*, (2) *1 to 2 times*, (3) *3 to 5 times*, (4) *6 to 9 times*, (5) *10 to 19 times*, (6) *20 to 29 times*, and (7) *30+ times*.

### **Relationships Between Risk and Protective Factors, and Substance Use and Delinquency**

**Overview of Key Findings.** With the exception of community opportunities for positive involvement and community rewards for positive involvement, correlations of the individual factors and the indexes with each outcome variable of interest were all significant at  $p < .0001$ . The individual risk factors and the risk factor index were positively correlated with substance use and ASB. The individual protective factors and the protective factor index, on the other hand, were negatively correlated with substance use and ASB. The best risk factor predictors in the community domain were exposure to community ATOD use, laws and norms favorable to ATOD use, perceived availability of drugs and handguns, and ability to purchase alcohol or tobacco. In the family domain, risk factors were fairly similar to one another in their predictive ability, with poor family supervision being the weakest risk factor. In the school domain, low school commitment was a slightly better predictor than poor academic performance. Most of the predictors in the peer-individual domain accounted for substantial variance in substance use and ASB, except for low perceived ATOD use risk. Protective factors generally accounted for much less variance than risk factors, with the best protective factors being belief in the moral order and peer disapproval of ATOD use.

Table 66 displays the correlations of the individual risk and protective factors, and the risk and protective indexes with each outcome variable of interest. A summary of the findings follows.

- Within the **community domain**, the best risk factor predictors were exposure to community ATOD use, laws and norms favorable to ATOD use, perceived availability of drugs and handguns, and ability to purchase alcohol or tobacco. Each of these community risk factors alone accounted for as much as 16% of the variance. Community disorganization and transition and mobility were each significant predictors, but each accounted for less variance than the other community risk factors (see Table 66).
- Within the **family domain**, each risk factor accounted for at least 4% of the variance in one or more of the outcome variables of interest, with many of the factors accounting for 8% of the variance. The weakest risk factor in the family domain was poor family supervision where correlations were .20 or less (see Table 66).

**TABLE 66**  
**Correlations Between Risk/Protective Factors and Substance Use and Antisocial Behaviors (ASBs) Prevalence, 2003**

(Entries are correlations)

Risk/Protective Factors	Alcohol, Tobacco, and Other Drug (ATOD) Use						Frequency of ASB Occurrence				
	Number of Drugs Used in Lifetime	Number of Drugs Used Past 30 Days	Monthly Cigarette Use	Monthly Alcohol Use	Monthly Marijuana Use	Substance Abuse	Drunk at School	Suspended from School	Attacked Someone	Sold Illegal Drugs	Arrested
<b>Community Domain: Risk Factors</b>											
Community Disorganization	.17	.13	.11	.16	.13	.13	.14	.10	.17	.11	.10
Transition & Mobility	.13	.07	.09	.10	.08	.09	.10	.09	.10	.07	.09
Exposure to Community ATOD Use	.37	.27	.30	.37	.34	.34	.32	.13	.21	.24	.16
Laws and Norms Favorable to ATOD Use	.37	.25	.25	.33	.29	.31	.31	.16	.19	.23	.17
Perceived Availability of Drugs and Handguns	.40	.26	.23	.34	.29	.30	.31	.14	.21	.24	.17
Ability to Purchase Alcohol or Tobacco	.41	.35	.34	.37	.32	.30	.38	.18	.22	.33	.25
<b>Community Domain: Protective Factors</b>											
Community Opportunities for Positive Involvement	NS	-.03	-.02	NS	-.02	NS	-.02	-.06	-.03	NS	-.04
Community Rewards for Positive Involvement	-.08	-.04	-.05	-.06	-.05	-.06	-.06	-.03	NS	-.04	NS
<b>Family Domain: Risk Factors</b>											
Poor Family Supervision	.20	.17	.15	.18	.15	.14	.17	.12	.12	.12	.12
Lack of Parental Sanctions for ASBs	.25	.24	.20	.22	.22	.17	.23	.17	.15	.18	.18
Parental Attitudes Favorable Toward ATOD Use	.32	.28	.27	.35	.32	.26	.31	.14	.17	.25	.17
Exposure to Family ATOD Use	.28	.22	.24	.30	.28	.25	.26	.12	.16	.21	.13
Parental Attitudes Favorable Toward ASB	.28	.26	.18	.25	.22	.17	.23	.17	.23	.20	.17
Family (Sibling) History of ASB	.30	.18	.23	.29	.25	.26	.25	.13	.14	.17	.14
<b>Family Domain: Protective Factors</b>											
Family Attachment	-.18	-.12	-.13	-.14	-.11	-.15	-.13	-.06	-.09	-.08	-.06
Family Opportunities for Prosocial Involvement	-.18	-.12	-.13	-.14	-.11	-.13	-.12	-.05	-.09	-.08	-.07
Family Rewards for Prosocial Involvement	-.18	-.13	-.14	-.15	-.11	-.14	-.15	-.09	-.12	-.10	-.10

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**TABLE 66 (continued)**  
**Correlations Between Risk/Protective Factors and Substance Use and Antisocial Behaviors (ASBs) Prevalence, 2003**  
(Entries are correlations)

Risk/Protective Factors	Alcohol, Tobacco, and Other Drug (ATOD) Use						Frequency of ASB Occurrence				
	Number of Drugs Used in Lifetime	Number of Drugs Used Past 30 Days	Monthly Cigarette Use	Monthly Alcohol Use	Monthly Marijuana Use	Substance Abuse	Drunk at School	Suspended from School	Attacked Someone	Sold Illegal Drugs	Arrested
<b>School Domain: Risk Factors</b>											
Low School Commitment	.26	.18	.18	.23	.21	.19	.21	.12	.16	.16	.13
Poor Academic Performance	.16	.12	.17	.14	.14	.11	.17	.18	.13	.12	.14
<b>School Domain: Protective Factors</b>											
School Opportunities for Positive Involvement	-.13	-.13	-.09	-.11	-.11	-.07	-.11	-.10	-.09	-.09	-.09
School Rewards for Positive Involvement	-.16	-.10	-.10	-.15	-.12	-.12	-.12	-.03	-.07	-.08	-.05
<b>Peer-Individual Domain: Risk Factors</b>											
Early Initiation of Problem Behaviors	.61	.41	.42	.52	.46	.43	.48	.36	.40	.34	.35
Favorable Attitudes Toward ATOD Use	.50	.38	.43	.50	.45	.43	.45	.18	.23	.32	.23
Low Perceived ATOD Use Risk	.21	.21	.15	.17	.17	.11	.17	.16	.13	.13	.14
Antisocial Behaviors (ASBs)	.48	.46	.34	.39	.46	.35	.75	.55	.68	.73	.68
Favorable Attitudes Toward ASB	.38	.29	.26	.36	.30	.28	.34	.21	.32	.25	.22
Friends' ATOD Use	.48	.30	.37	.46	.38	.39	.40	.19	.25	.27	.23
Interaction with Antisocial Peers	.45	.35	.34	.40	.39	.34	.48	.35	.39	.40	.37
Rewards for Antisocial Involvement	.46	.32	.34	.43	.37	.36	.39	.20	.30	.28	.23
Rebelliousness	.34	.26	.23	.31	.25	.25	.28	.17	.26	.21	.18
Sensation Seeking	.42	.29	.27	.38	.33	.33	.36	.21	.33	.27	.22
<b>Peer-Individual Domain: Protective Factors</b>											
Peer Disapproval of ATOD Use	-.25	-.24	-.18	-.20	-.18	-.14	-.20	-.16	-.17	-.15	-.15
Belief in the Moral Order	-.36	-.25	-.23	-.34	-.28	-.27	-.31	-.17	-.29	-.22	-.17
Educational Aspirations	-.12	-.12	-.13	-.09	-.12	-.07	-.15	-.15	-.13	-.13	-.14
<b>Risk Index</b>	.51	.37	.38	.48	.41	.41	.43	.28	.35	.29	.26
<b>Protective Index</b>	-.24	-.18	-.18	-.20	-.18	-.18	-.19	-.12	-.15	-.13	-.11

NOTES: *ATOD* refers to Alcohol, Tobacco, and Other Drug Use. *ASB* refers to Antisocial Behavior. Only correlations significant at  $p < .0001$  are reported in the table. Correlations not significant at  $p < .001$  are indicated by NS. See Table 65 for explanation of predictor variables. See chapter text for explanation of outcome variables.

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- Within the *school domain*, low school commitment accounted for more variance than poor academic performance. For instance, low school commitment accounted for 7% of the variance in number of drugs used in a student's lifetime ( $r = .26$ ;  $r^2 = .07$ ), whereas poor academic performance only accounted for 3% of the variances ( $r = .16$ ;  $r^2 = .03$ ).
- Most of the risk factors within the *peer-individual domain* accounted for at least 15% of the variance in substance use and ASB occurrence. Many of the peer-individual risk factors alone accounted for as much variance as the risk factor index. Early initiation of problem behaviors was the strongest predictor of substance use and ASB occurrence, with correlations as high as .61 ( $r^2 = .37$ ). Low perceived ATOD use risk was the weakest peer-individual predictor, accounting for only about 4% of the variance. The high proportion of Hawaii students associating harm with alcohol, tobacco, and illicit drugs (see Chapter 8) is most likely suppressing the relationship between perceived ATOD use risk and substance use.
- *Protective factors* in each of the four domains typically accounted for much less variance than the risk factors, with correlations often less than -.20. Low correlations for protective factors, however, are expected because these variables are presumed to "buffer" the effects of risk factors on substance use and problem behaviors, rather than have direct effects on substance use and problem behaviors. The two best protective factor predictors were peer disapproval of ATOD use and belief in the moral order (see Table 66).
- The *risk factor index* was positively correlated with substance use, substance abuse, and frequency of ASB occurrence. Variance accounted for by the risk factor index was as high as 26% for some outcome variables. For instance, the risk factor index accounted for 26% of the variance in the number of drugs used in the student's lifetime ( $r = .51$ ;  $r^2 = .26$ ) and 18% of the variance in substance abuse ( $r = .41$ ;  $r^2 = .17$ ). As seen in Table 66, the risk factor index is slightly better at predicting substance use than at predicting ASBs, particularly the ASBs unrelated to substance use.
- The *protective factor index* was negatively correlated with substance use, substance abuse, and frequency of ASB occurrence. Variance accounted for by the protective factor index is generally only about 3%. For instance, the protective factor index accounted for 3% of the variance in substance abuse ( $r = -.18$ ;  $r^2 = .03$ ) and 6% of the variance in number of drugs used in the student's lifetime ( $r = -.24$ ;  $r^2 = .06$ ). The smaller amount of variance accounted for by the protective factor index is to be expected, given that protective factors are presumed to be indirectly related to substance use and delinquency: Protective factors buffer the effects of the risk factors on substance use and delinquency.

## SUBGROUP COMPARISONS

The following sections develop risk and protective factor profiles based on five different subgroup classifications: (1) school type, (2) place of residence, (3) public school district, (4) sex, and (5) ethnic background. For each subgroup classification, risk and protective profiles were developed that show the percentage of students at risk and the percentage of students with protection, based on each scale. The profiles developed on the following pages allow for two types of comparisons: comparisons across subgroups (e.g., males versus females) and comparisons between a particular subgroup and students statewide. Grade-level differences for each subgroup are not addressed. Rather, profiles are developed for each subgroup by weighting the percentage at risk, or protected, at each grade level, by statewide *N*-sizes at that grade level for that specific subgroup (see Appendix B for approximate weighted *N*-sizes). Weighting was done to prevent estimates from being biased by disproportionate numbers of 6th, 8th, 10th, and 12th graders participating in the study. Creating overall estimates across grades for each risk and protective factor allowed for greater ease in displaying differences across subgroups. As noted earlier in the chapter, grade-level differences for each subgroup and trend data can be found in the profile reports made available on the State of Hawaii Department of Health's web site.

Table 67 presents the percentages of students statewide and at each grade level who meet each risk and protective criterion. The statewide proportions listed in the tables are uninformative by themselves. The statewide proportions are used as a comparison base to determine which subgroups are above or below the statewide population on each of the risk and protective factors. Subgroups above the statewide sample on individual risk factors and below the statewide sample on individual protective factors are most at risk. As previously indicated, prevention efforts should move toward reversing or reducing risk factors or enhancing protective factors.

For each subgroup classification discussed in this chapter, a table is provided that lists the percentages of students who reported "elevated risk" or "elevated protection" on the various scales. The tables also lists the percentages of students who are exposed to a high, moderate, or low number of risk and protective factors. Subgroups that are exposed to a high number of risk factors and a low number of protective factors are most in need of prevention programs. Examination of the risk and protective factors indexes at the end of each table is used to assess which communities are in greatest need of prevention programs. An understanding of which risk and protective factors to address in various communities can most easily be assessed by examining the charts that follow the tables. Charts are provided that highlight elevated risk and elevated protection in each of the four domains (community, family, school, and peer-individual). In the charts, the bars represent the percentage of students from a particular subgroup who indicated "elevated risk" on the risk factor scales or "elevated protection" on the protective factor scales. The **dots** on the charts represent the percentage of Hawaii students statewide who reported "elevated risk" or "elevated protection" on the 2003 survey. The comparison to the overall state percentages provides information used to determine the relative importance of each risk or protective factor level for the specific subgroup: Bars that are higher than the **dot** in the risk factor charts represent elevated risk; bars that are higher than the **dot** in the protective factor chart represent elevated protection. Prevention efforts should focus on risk factors that are above the **dots** and protective factors that are below the **dots**. Factors most (or least) prevalent for a specific subgroup, in comparison to other subgroups in that classification, are determined by scanning across the charts and comparing bars. Bars that are higher than other bars represent elevated risk or elevated protection for that particular subgroup.

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The charts and tables for counties and public school districts are summarized in Table 71 (pages 502-503). The charts and tables for sex and ethnicity are summarized in Table 74 (pages 522-523). In these two tables, dates ('00, '02, '03, or all) are placed beside each risk factor that was identified as higher than or equal to statewide percentages during the year represented by the date. The date indicates that the risk factor was higher than the statewide average during that year (i.e., the risk factor needed to be addressed by prevention efforts). Dates are also placed beside each protective factor that was identified as lower than or equal to statewide percentages. The date indicates that the protective factor was lower than the statewide average during that year (i.e., the protective factor needed to be addressed by prevention efforts). Prevention efforts have worked if a risk or protective factor was marked as problematic in '02, but was not marked as problematic in '03. Prevention efforts need to focus on those factors which remain problematic in 2003 or which have become problematic in 2003. Factors that were problematic in all three survey years, as indicated by the word *all*, are the most important factors to address in prevention efforts.

The final table in this chapter, Table 75, provides trend data for each risk and protective factor by subgroup. As addressed in Chapter 3, 2003 data was collected in the fall semester, which was four months earlier than previous data collection years. The change scores noted between 2002 and 2003 could be partially a function of surveying the students earlier in the academic year. To best determine if a prevention effort is working in a particular community or group, one should examine if the factor of interest is above or below the statewide percentages, in addition to examining whether there was a positive or negative change in the factor from 2002 to 2003. For instance, if a risk factor in a particular subgroup showed a decrease from 2002 to 2003 and was *below* the statewide percentage in 2003, prevention efforts worked. On the other hand, if a risk factor in a particular subgroup showed a decrease from 2002 to 2003 and was *above* the statewide percentage in 2003, prevention efforts may not have worked. Rather, the change score may be reflective of surveying the students earlier in the academic year, which resulted in a lower percentage of students, overall, affected by that particular risk factor. Prevention efforts have worked on various protective factors if there was both an increase noted from 2002 to 2003 and the protective factors is above the statewide percentage.

Some risk and protective factors may be impossible to change. For instance, the risk factor, sensation seeking, is a personality trait involving a high need for arousal. Prevention efforts are not going to be able to alter a person's personality. In the case of personality variables, prevention programs must utilize the information to design more effective campaigns aimed at people with certain personality traits. For instance, tests of the *Activation Model of Information Exposure* (Palmgreen, Donohew, Lorch, Hoyle, & Stephenson, 2001; Stephenson, 2003) have shown that high sensation seekers are more likely to attend to drug prevention campaigns that use high sensation value messages (e.g., rock music, vivid pictures, scary images) instead of low sensation value messages.

### **Grade-Level Comparisons**

Table 67 lists the percentage of students, at each grade level, who meet the criterion on each risk and protective factor. Because cutpoints are grade specific (see Chapter 3), discussing differences between each grade on each factor is relatively uninformative. With each grade-level advancement comes greater social, psychological, and educational challenges. Students in higher grade levels become more independent from their families and have to learn to get along with a wider group of peers. Thus, the

**TABLE 67**  
**Statewide Risk and Protective Factors, by Grade, 2003**

(Entries are percentages %)

		Grade 6-12	6th Grade	8th Grade	10th Grade	12th Grade
Community Domain	<b><u>Risk Factors</u></b>					
	Community Disorganization	49.9	42.3	52.4	52.6	52.7
	Transition & Mobility	46.8	51.7	38.3	43.6	44.2
	Exposure to Community ATOD Use	44.7	34.7	48.2	46.7	42.4
	Laws & Norms Favorable to ATOD Use	37.1	36.9	39.6	37.7	33.0
	Perceived Availability of Drugs & Handguns	42.1	37.5	47.7	44.1	43.1
	Ability to Purchase Alcohol or Tobacco	8.5	1.3	5.3	11.3	20.5
	<b><u>Protective Factors</u></b>					
	Community Opportunities for Positive Involvement	48.4	44.7	48.2	51.0	53.8
	Community Rewards for Positive Involvement	40.6	37.2	37.1	43.4	38.2
Family Domain	<b><u>Risk Factors</u></b>					
	Poor Family Supervision	37.3	37.0	35.4	36.5	45.3
	Lack of Parental Sanctions for ASBs	23.8	11.0	22.4	34.5	27.1
	Parental Attitudes Favorable Toward ATOD Use	17.1	5.0	12.5	21.4	31.4
	Exposure to Family ATOD Use	46.2	50.0	54.1	39.4	43.6
	Parental Attitudes Favorable Toward ASB	25.5	15.3	26.4	28.6	28.5
	Family (Sibling) History of ASB	32.8	19.4	34.0	32.3	43.4
	<b><u>Protective Factors</u></b>					
	Family Attachment	57.3	60.6	57.2	51.7	55.9
	Family Opportunities for Positive Involvement	44.9	57.5	47.0	38.8	33.7
Family Rewards for Positive Involvement	53.2	55.7	47.6	54.3	49.4	
School Domain	<b><u>Risk Factors</u></b>					
	Low School Commitment	44.5	40.5	43.3	45.1	50.9
	Poor Academic Performance	50.7	47.8	50.8	52.1	49.9
	<b><u>Protective Factors</u></b>					
	School Opportunities for Positive Involvement	44.9	43.3	48.4	47.1	29.1
School Rewards for Positive Involvement	28.2	30.7	32.4	22.6	23.0	

(Table continued on next page)

**TABLE 67 (continued)**  
**Statewide Risk and Protective Factors, by Grade, 2003**

(Entries are percentages %)

		<b>Grade 6-12</b>	<b>6th Grade</b>	<b>8th Grade</b>	<b>10th Grade</b>	<b>12th Grade</b>
<b>Peer-Individual Domain</b>	<b><u>Risk Factors</u></b>					
	Early Initiation of Problem Behaviors	35.3	25.4	32.3	37.1	41.6
	Favorable Attitudes Toward ATOD Use	31.6	8.6	29.8	44.0	48.1
	Low Perceived ATOD Use Risk	26.0	18.3	30.5	25.6	27.7
	Antisocial Behaviors (ASBs)	26.0	14.1	28.3	30.9	31.2
	Favorable Attitudes Toward ASB	45.1	30.5	54.3	46.0	47.8
	Friends' ATOD Use	40.2	21.3	47.3	46.6	46.8
	Interaction with Antisocial Peers	46.6	30.8	56.0	48.0	51.9
	Rewards for Antisocial Involvement	40.4	45.7	39.6	39.1	38.1
	Rebelliousness	28.2	28.0	22.6	29.3	30.3
	Sensation Seeking	32.9	27.8	36.0	38.3	34.6
	<b><u>Protective Factors</u></b>					
	Peer Disapproval of ATOD Use	60.1	74.1	56.0	54.3	53.9
	Belief in the Moral Order	47.7	57.4	54.3	39.2	38.5
	Educational Aspirations	40.7	34.6	38.0	45.6	46.5
<b>Indexes</b>	<b><u>Risk Factor Index</u></b>					
	Low Risk (0 to 9 Risk Factors)	60.8	75.7	59.7	56.2	53.3
	Moderate Risk (10 to 14 Risk Factors)	22.6	17.7	22.4	23.5	25.3
	High Risk (15 to 24 Risk Factors)	16.7	6.6	18.0	20.3	21.4
	<b><u>Protective Factor Index</u></b>					
	Low Protection (0 to 3 Protective Factors)	34.6	29.5	36.2	36.5	40.8
	Moderate Protection (4 to 6 Protective Factors)	39.8	40.7	36.9	40.0	39.9
High Protection (7 to 10 Protective Factors)	25.6	29.8	26.9	23.5	19.3	

NOTES: The percentages above represent the percentage of students who are either at risk for or who have protection from developing a substance abuse problem. Cutpoints for each risk and protective factor are different for each grade level (see Chapter 3). Overall estimates in the current table are based on using a grade combined weight. Statewide percentages are used as comparison points for determining which factors should be targeted in various communities or subgroups. Risk factors above and protective factors below the statewide percentages should be considered critical factors to address in prevention efforts. Meeting the cutpoint criteria for a particular risk factor significantly increases one's likelihood of having or developing a substance abuse problem, but does not guarantee that a substance abuse problem will exist. Similarly, meeting the cutpoint for a protective factor significantly increases one's likelihood of being protected from developing a substance abuse problem, but does not guarantee that a substance abuse problem will be avoided. The likelihood of a substance abuse problem increases with the number of risk factors to which a student is exposed and decreases with the number of protective factors to which a student is exposed. The risk and protective factor indexes provide the best indication of degree of risk and protection.

amount of exposure to risk factors should increase, and the amount of exposure to protective factors should decrease, as the student advances in grade. The risk and protective factor indexes at the end of Table 67 address this belief. As seen in Table 67, a greater number of students in the higher grade levels are exposed to a high number of risk factors (15 or more risk factors). Eighteen percent of the 8th graders, 20% of the 10th graders, and 21% of the 12th graders are exposed to 15 or more risk factors, whereas only 7% of 6th graders are exposed to 15 or more risk factors. The amount of protection, on the other hand, is lower in the higher grade levels. Thirty percent of the 6th graders have high protection by being exposed to seven or more protective factors, whereas only 27% of 8th graders, 24% of 10th graders, and 19% of 12th graders have high protection.

### **School-Type Comparisons**

The following section begins by comparing public to private school students on the number of risk and protective factors to which they are exposed (i.e., risk and protective factor indexes). Next, school-type comparisons are made by examining the individual risk and protective factors that are above or below the statewide percentages for private versus public school students. Prevention efforts should focus on reducing risk factors that are above the statewide percentages and enhancing protective factors that are below the statewide percentages. The category of private school students includes students who attend either private schools or charter schools.

Table 68 lists the percentages of students in public versus private schools who meet each risk and protective factor, and lists the percentages of students who are exposed to a high, moderate, or low number of factors. Figures 83 through 86 display each risk factor in each domain so that public and private school students can be compared to each other, as well as to statewide percentages. Figure 87 displays each protective factor in each domain so that public and private school students can be compared to each other, as well as to statewide percentages. Bars represent public and private school percentages, and **dots** represent statewide percentages. Bars above the **dots** on the risk factor figures represent elevated risk, and bars below the **dots** on the protective factor figures represent low levels of protection. Prevention efforts should address risk factors that are higher than statewide averages and protective factors that are lower than statewide averages.

**Overview of Key Findings.** A greater percentage of public school students than private school students are exposed to a high number of risk factors, whereas a greater percentage of private school students than public school students are exposed to a high number of protective factors. Thus, public school students are at greater risk than private school students for substance use and delinquency. Although a greater proportion of public school students than private school students typically meet the risk criteria for each risk factor, there are instances when public and private school students are similar to one another, and there are a few cases where more private school students meet the risk criteria than public school students. A greater proportion of private school students had elevated protection on various protective factors than public school students.

- Comparisons on the *risk factor index* show that a greater percentage of public school students (17%) than private school students (15%) are exposed to a high number of risk factors (15 or more).

**TABLE 68**  
**Risk and Protective Factors by School Type, 2003**

(Entries are percentages %, weighted by grade)

		Statewide	Public Schools	Private Schools
Community Domain	<b><u>Risk Factors</u></b>			
	Community Disorganization	49.9	50.2	48.3
	Transition & Mobility	46.8	48.1	41.7
	Exposure to Community ATOD Use	44.7	46.0	40.1
	Laws & Norms Favorable to ATOD Use	37.1	38.0	33.2
	Perceived Availability of Drugs & Handguns	42.1	41.7	44.2
	Ability to Purchase Alcohol or Tobacco	8.5	8.5	9.0
	<b><u>Protective Factors</u></b>			
	Community Opportunities for Positive Involvement	48.4	47.5	52.5
Community Rewards for Positive Involvement	40.6	39.9	43.7	
Family Domain	<b><u>Risk Factors</u></b>			
	Poor Family Supervision	37.3	37.9	34.6
	Lack of Parental Sanctions for ASBs	23.8	25.1	19.7
	Parental Attitudes Favorable Toward ATOD Use	17.1	17.4	16.8
	Exposure to Family ATOD Use	46.2	46.8	44.1
	Parental Attitudes Favorable Toward ASB	25.5	25.8	25.2
	Family (Sibling) History of ASB	32.8	34.6	27.7
	<b><u>Protective Factors</u></b>			
	Family Attachment	57.3	55.7	63.1
	Family Opportunities for Positive Involvement	44.9	43.8	48.3
Family Rewards for Positive Involvement	53.2	51.2	60.8	
School Domain	<b><u>Risk Factors</u></b>			
	Low School Commitment	44.5	44.9	43.1
	Poor Academic Performance	50.7	52.8	42.3
	<b><u>Protective Factors</u></b>			
	School Opportunities for Positive Involvement	44.9	42.8	52.9
School Rewards for Positive Involvement	28.2	26.7	33.0	

(Table continued on next page)

**TABLE 68 (continued)**  
**Risk and Protective Factors by School Type, 2003**

(Entries are percentages %, weighted by grade)

		Statewide	Public Schools	Private Schools
<b>Peer-Individual Domain</b>	<b><u>Risk Factors</u></b>			
	Early Initiation of Problem Behaviors	35.3	37.3	28.0
	Favorable Attitudes Toward ATOD Use	31.6	31.9	31.4
	Low Perceived ATOD Use Risk	26.0	26.3	24.7
	Antisocial Behaviors (ASBs)	26.0	27.5	20.6
	Favorable Attitudes Toward ASB	45.1	45.1	46.4
	Friends' ATOD Use	40.2	41.3	37.1
	Interaction with Antisocial Peers	46.6	48.0	42.0
	Rewards for Antisocial Involvement	40.4	40.8	39.3
	Rebelliousness	28.2	28.2	28.7
	Sensation Seeking	32.9	32.6	34.9
	<b><u>Protective Factors</u></b>			
	Peer Disapproval of ATOD Use	60.1	59.7	60.9
	Belief in the Moral Order	47.7	47.0	48.9
Educational Aspirations	40.7	36.8	56.6	
<b>Indexes</b>	<b><u>Risk Factor Index</u></b>			
	Low Risk (0 to 9 Risk Factors)	60.8	59.1	65.5
	Moderate Risk (10 to 14 Risk Factors)	22.6	23.6	19.7
	High Risk (15 to 24 Risk Factors)	16.7	17.4	14.8
	<b><u>Protective Factor Index</u></b>			
	Low Protection (0 to 3 Protective Factors)	34.6	36.6	27.1
	Moderate Protection (4 to 6 Protective Factors)	39.8	40.0	39.2
High Protection (7 to 10 Protective Factors)	25.6	23.4	33.8	

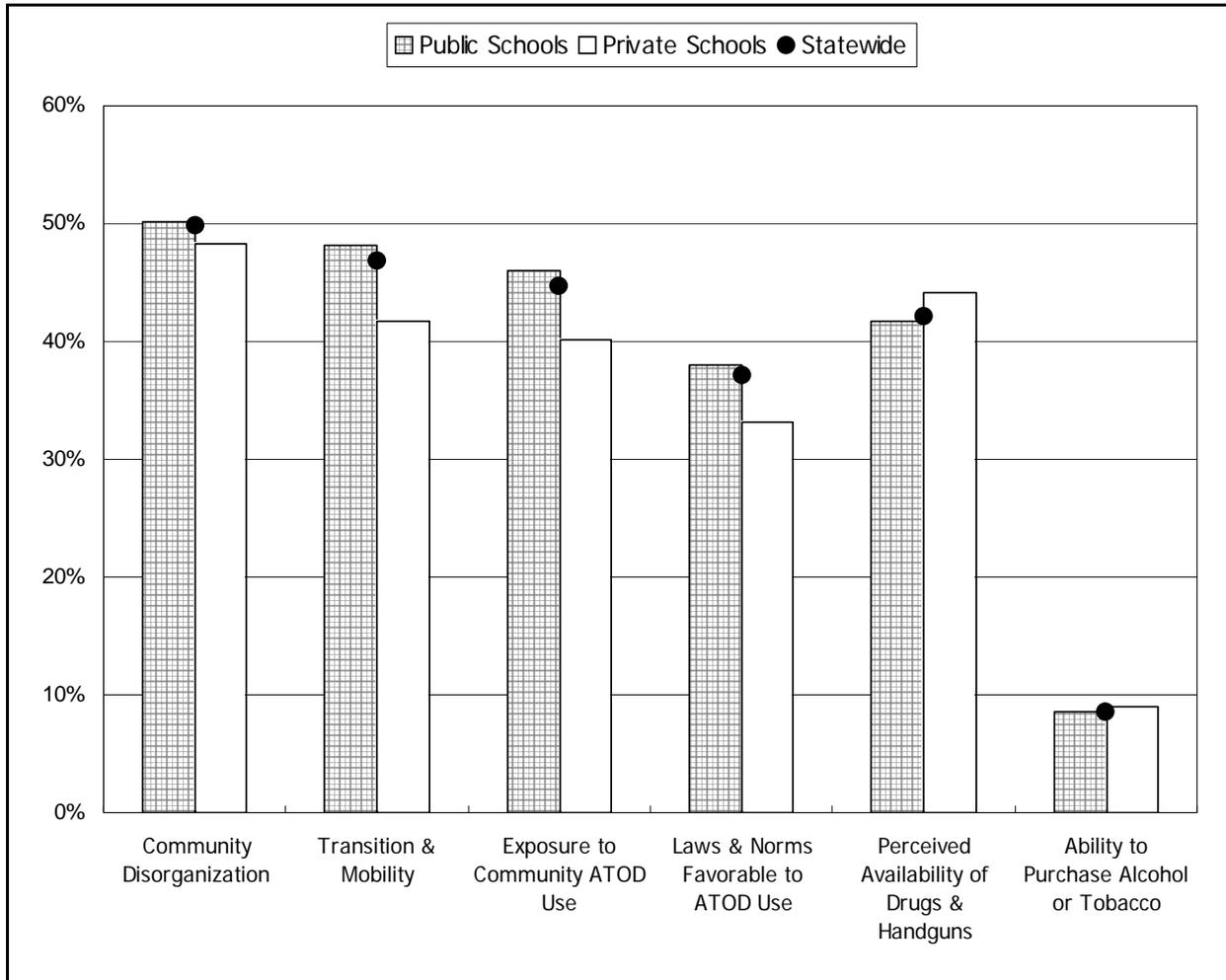
NOTES: The percentages above represent the percentage of students who are either at risk for or who have protection from developing a substance abuse problem. Overall estimates in the current table are based on using a grade combined weight. Statewide percentages are used as comparison points for determining which risk and protective factors should be targeted in various communities or subgroups. Risk factors above and protective factors below the statewide percentages should be considered critical factors to address in prevention efforts. Having a particular risk factor significantly increases one's likelihood of having or developing a substance abuse problem, but does not guarantee that a substance abuse problem will exist. Similarly, having a protective factor significantly increases one's likelihood of being protected from developing a substance abuse problem, but does not guarantee that a substance abuse problem will be avoided. The likelihood of a substance abuse problem increases with the number of risk factors to which a student is exposed and decreases with the number of protective factors to which a student is exposed. The risk and protective factor indexes provide the best indication of degree of risk and protection. The category of private schools included both private and charter schools.

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- Comparisons on the *protective factor index* show that a greater percentage of private school students (34%) than public school students (23%) are exposed to a high number of protective factors (7 or more). In the current study, only 2% of the students who were exposed to 7 or more protective factors were diagnosed with a substance abuse problem.
- Public school students have more elevated *risk factors across all domains* than private school students (see Figures 83 through 86). Within the *community domain*, more public school students than private school students are at risk for substance abuse because of community disorganization, transition and mobility, exposure to community ATOD use, and laws and norms favorable to ATOD use. More private school students than public school students are at risk for developing a substance abuse problem because of perceived availability of substances. Nearly equivalent proportions of private and public school students meet the risk criteria for ability to purchase alcohol or tobacco, but the difference is minimal (see Figure 83).
- Within the *family domain*, public and private school students are fairly similar to one another in regards to parental attitudes favorable toward ATOD use and parental attitudes favorable toward ASB. More public school students than private school students are at risk because of poor family supervision, lack of parental sanctions for ASBs, exposure to family ATOD use, and family history of ASBs (see Figure 84).
- Within the *school domain*, more public school students than private school students are at risk because of poor academic performance. The differences between public and private school students on low school commitment are much smaller (see Figure 85).
- Public school students have more elevated risk factors in the *peer-individual domain* (see Figure 86). Public and private school students are fairly similar to one another on favorable attitudes toward ATOD use and rebelliousness, with differences between the two groups of students less than 1 percentage point. More private school students than public school students have elevated risk on sensation seeking (35% vs. 33%) and favorable attitudes toward ASB (46% vs. 45%). Substantially more public school students than private school students are at risk because of early initiation of problem behaviors (37% vs. 28%), ASBs (28% vs. 21%), and interaction with antisocial peers (48% vs. 42%).
- Private school students have more elevated *protection factors across all domains* than public school students (see Figure 88). Differences between public and private school students are most pronounced in regards to family attachment, family rewards for positive involvement, school opportunities for positive involvement, school rewards for positive involvement, and educational aspirations. Public and private school students are most similar to one another on belief in moral order.
- The differences noted between public and private school students on risk and protective factors in 2003 are fairly consistent with those noted in 2000 (see Klinge, 2001) and 2002 (see Pearson, 2003).

**FIGURE 83**  
**Community Risk Factors by School Type, 2003**

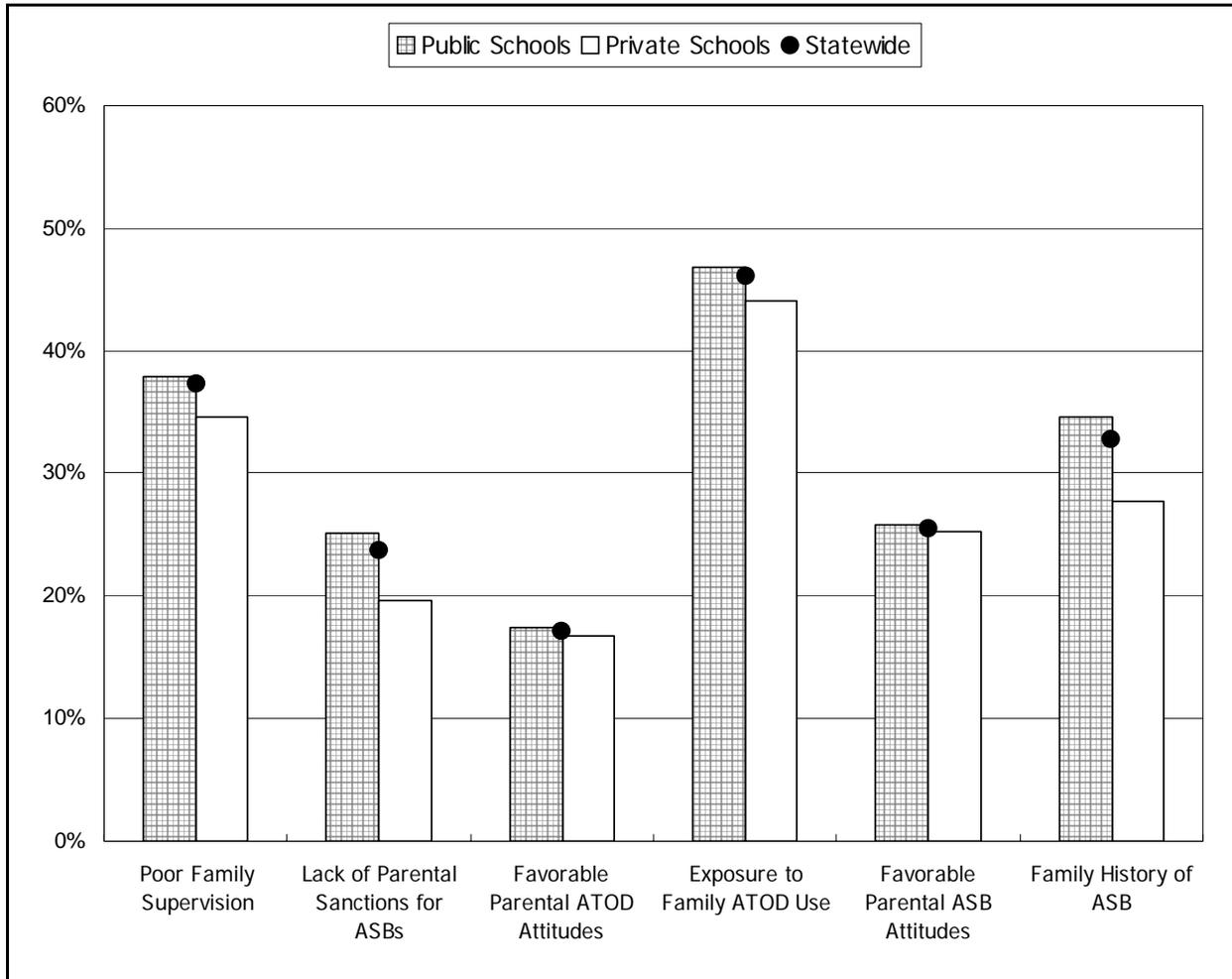
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the community domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts. The figure illustrates which community risk factors are most prevalent among public versus private/charter school students. Community risk factors most problematic for public school students are (1) transition and mobility, (2) exposure to community ATOD use, and (3) laws and norms favorable to ATOD use. Community risk factors most problematic for private school students are (1) perceived availability of drugs and handguns, and (2) ability to purchase alcohol or tobacco.

**FIGURE 84**  
**Family Risk Factors by School Type, 2003**

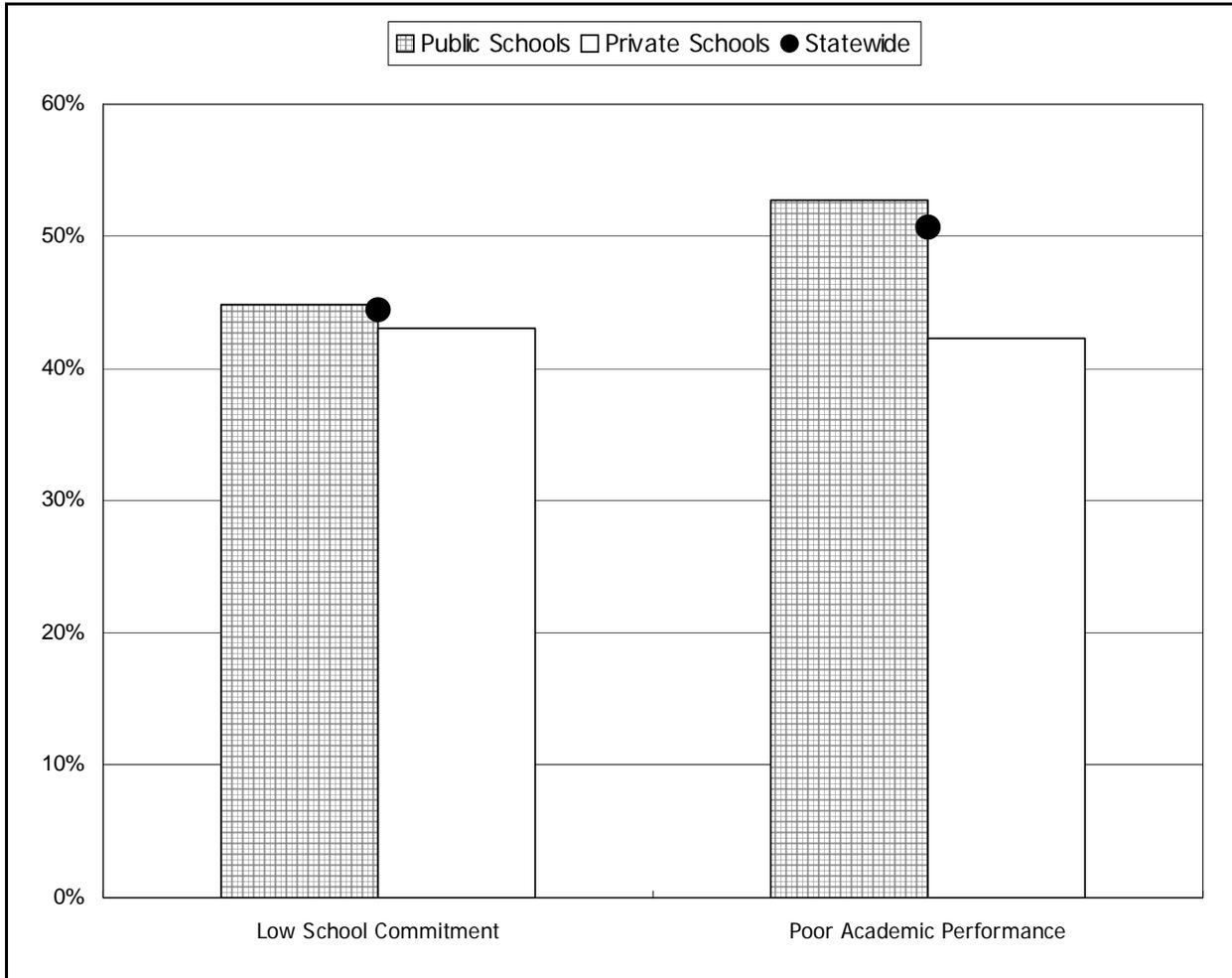
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the family domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts. The figure illustrates that public and private/charter school students are fairly similar to one another on parental attitudes favorable toward ATOD use and parental attitudes favorable toward ASB. More public school students than private/charter school students are at risk for developing a substance abuse problem because of poor family supervision, lack of parental sanctions for ASBs, exposure to family ATOD use, and family history of ASB. Thus, these risk factors should be the focus of prevention efforts directed at students in the public school systems.

**FIGURE 85**  
**School Risk Factors by School Type, 2003**

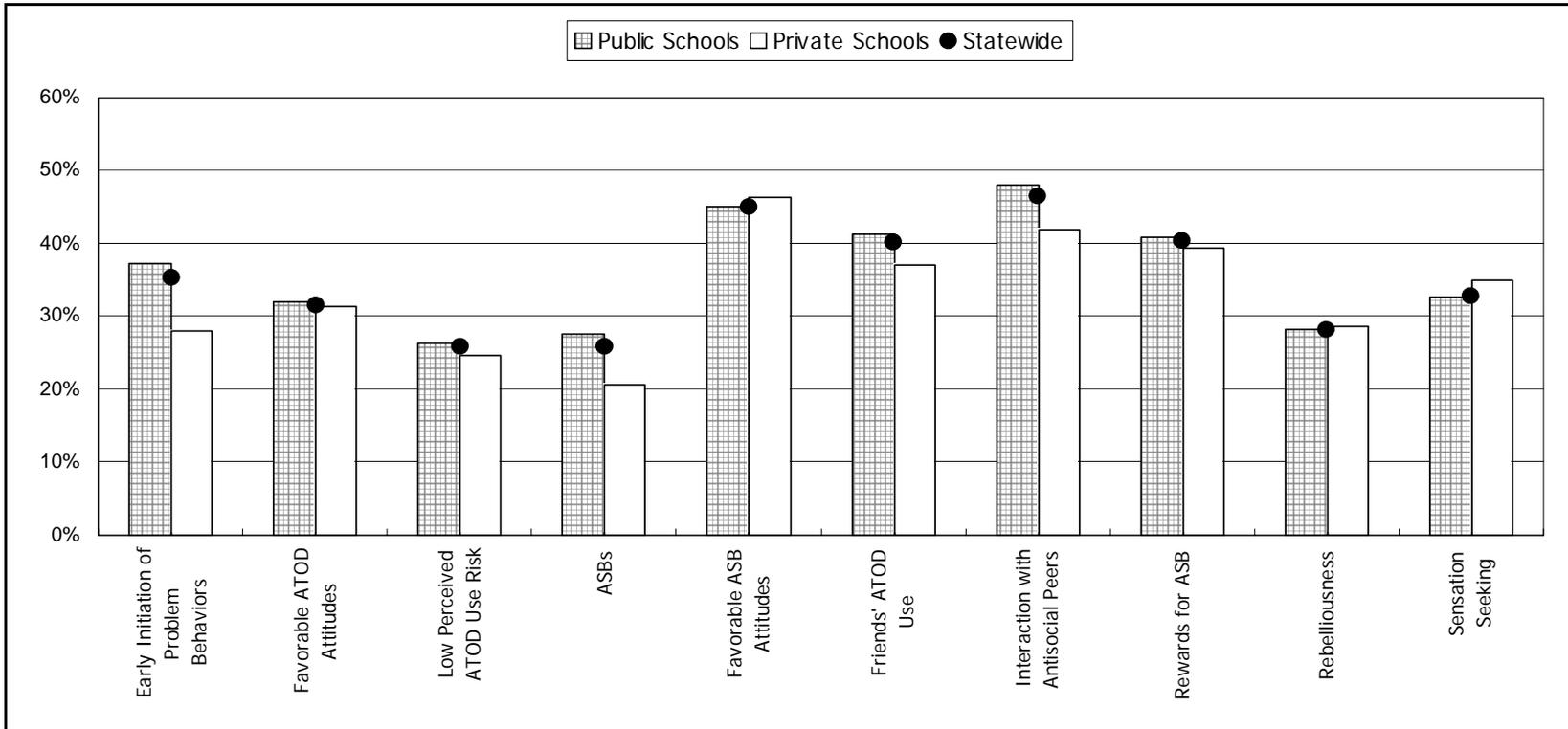
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the school domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts. The figure illustrates that more public school students than private/charter school students meet the risk criteria for both low school commitment and poor academic performance. Public and private/charter school students are most similar on low school commitment (e.g., disliking school and perceiving the course work as irrelevant).

**FIGURE 86**  
**Peer-Individual Risk Factors by School Type, 2003**

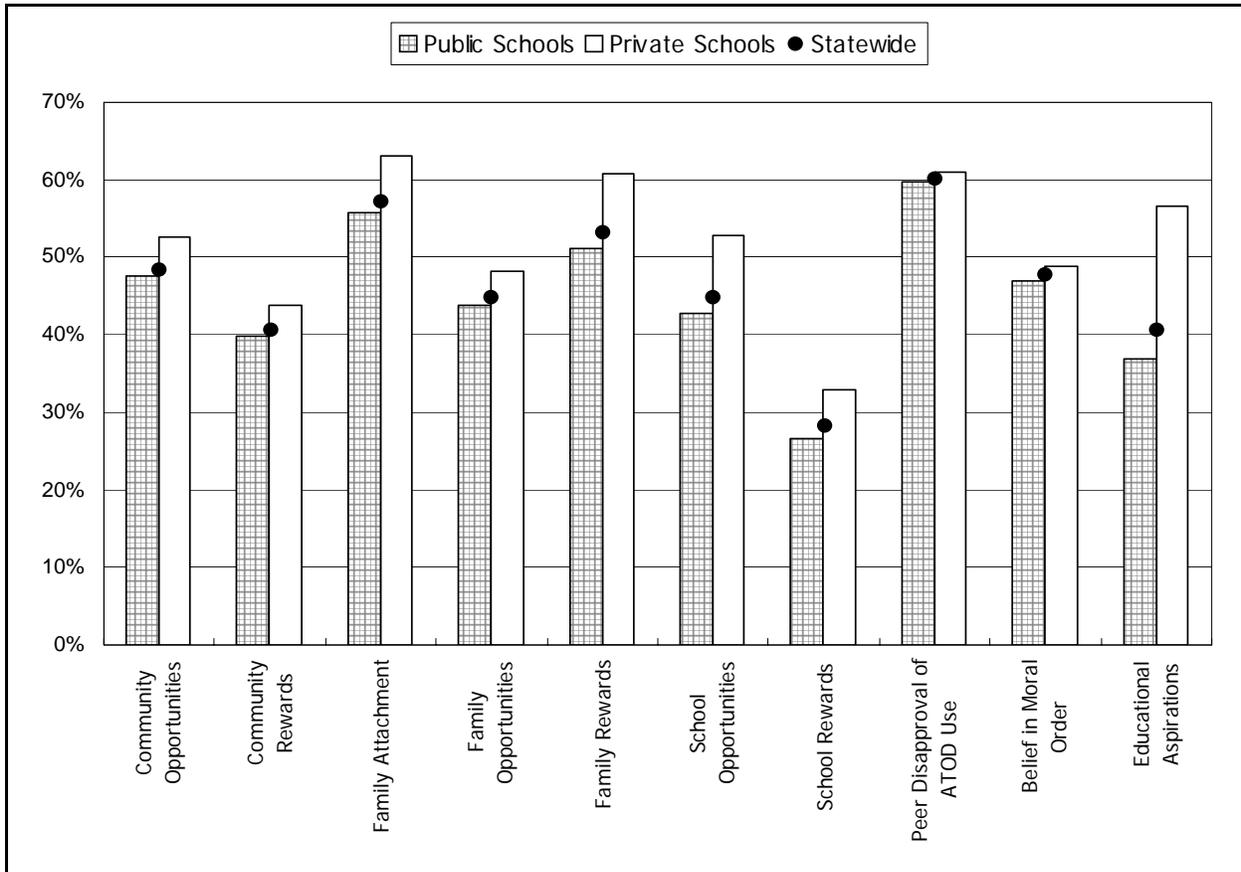
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the peer-individual domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts. Public and private/charter school students are fairly similar to one another on favorable ATOD attitudes, low perceived ATOD use risk, favorable ASB attitudes, rewards for ASB, and rebelliousness. More public school students than private/charter school students meet the risk criteria for early initiation of problem behaviors, ASBs, friends' ATOD use, friends' ATOD use, interaction with antisocial peers, and rewards for ASB. More private/charter school students than public school students meet the risk criteria for sensation seeking.

**FIGURE 87**  
**Community, Family, School, and Peer-Individual Protective Factors by School Type, 2003**

(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to enhance protective factors in the community, family, school, and peer-individual domain. Protective factors that are below or nearly equal to statewide percentages (e.g., bars below the **dot**) should be a top priority of prevention efforts. Across all domains, more private/charter school students than public school students meet the protection criteria. Private/charter school students, however, are fairly similar to public school students in the peer-individual domain, with the exception of education aspirations where private/charter school students are more protected. Thus, prevention efforts at the private/charter school level should focus primarily on increasing peer disapproval of ATOD use and students' beliefs in moral order. When comparing public school students to private/charter school students, the greatest discrepancy between the groups is noted for family attachment, family rewards for positive involvement, school opportunities for positive involvement, and educational aspirations. Thus, prevention efforts at the public school level should focus on increasing family attachment and family rewards for positive involvement, increasing school opportunities for positive involvement and school rewards for positive involvement, and encouraging students to further their education past high school.

## County-Level (Place of Residence) Comparisons

The following section begins by comparing students from different counties on the number of risk and protective factors to which they are exposed (i.e., risk and protective factor indexes). Next, county comparisons are made by examining the individual risk and protective factors that are above or below the statewide percentages. Prevention efforts should focus on reducing risk factors that are above the statewide percentages and enhancing protective factors that are below the statewide percentages. County definitions are based on place of residence and include public, private, and charter school students.

Table 69 lists the percentages of students in each county who meet each risk and protective factor, and the percentages of students who are exposed to a high, moderate, or low number of factors. Figures 88 through 91 display each risk factor in each domain so that counties can be compared to each other, as well as to statewide percentages. Figure 92 displays each protective factor in each domain for the same purposes. Bars represent county percentages, and **dots** represent statewide percentages. Bars above the **dots** on the risk factor figures represent elevated risk, and bars below the **dots** on the protective factor figures represent low levels of protection. Prevention efforts should address risk factors that are higher than statewide averages and protective factors that are lower than statewide averages.

**Overview of Key Findings.** Hawaii County, followed by Maui County, has the largest proportion of students with elevated risk on the risk factor index (15 or more risk factors). Hawaii County has the smallest proportion of students with high protection (7 or more protective factors) and the largest proportion of students with low protection (3 or fewer protective factors) on the protective factor index. On each specific risk factor, Hawaii and Maui Counties typically have the greatest proportion of students meeting the risk criteria. No one county clearly has a larger proportion of students with elevated protection across each protective factor, although Kauai County is higher than other counties on a number of protective factors.

- Comparisons on the *risk factor index* show that a greater percentage of students in Hawaii County (24%) than in the City & County of Honolulu (15%), and Kauai (14%) and Maui Counties (20%) are exposed to a high number of risk factors (15 or more). This is consistent with 2000 reports where Hawaii County had the highest proportion of students with elevated risk. Back in 2002, the City & County of Honolulu had the highest proportion of students with elevated risk, which corresponded with prevalence rates rising in 2002 for the City & County of Honolulu.
- County differences on the *protective factor index* also show Hawaii County students as most vulnerable. Only 24% of Hawaii County students have high protection (7 to 10 protective factors), compared to 26% in the City & County of Honolulu and Maui County, and 31% in Kauai County.

Risk factors that should be prioritized in each county can be noted by scanning Figures 88 through 91 and by looking for bars that are above or equal to the **dots** in the figures. Protective factors that should be prioritized in each county can be noted by scanning Figure 92 and by looking for bars that are below or equal to the **dots** in the figure. Table 71 summarizes the county-level comparisons by placing a date ('00, '02, '03, and/or all) to indicate the year in which the risk or protective factor was problematic. Prevention efforts should focus on factors that have become or that remain problematic in 2003.

**TABLE 69**  
**Risk and Protective Factors by County (Place of Residence), 2003**

(Entries are percentages %, weighted by grade)

		Statewide	C & C of Honolulu	Hawaii County	Kauai County	Maui County
Community Domain	<b><u>Risk Factors</u></b>					
	Community Disorganization	49.9	50.4	49.5	51.0	46.3
	Transition & Mobility	46.8	47.5	48.7	39.1	44.4
	Exposure to Community ATOD Use	44.7	44.0	48.5	39.7	46.8
	Laws & Norms Favorable to ATOD Use	37.1	33.5	49.8	37.8	42.8
	Perceived Availability of Drugs & Handguns	42.1	40.3	49.8	40.0	44.7
	Ability to Purchase Alcohol or Tobacco	8.5	8.2	10.2	7.4	9.3
	<b><u>Protective Factors</u></b>					
	Community Opportunities for Positive Involvement	48.4	44.7	53.5	58.4	60.2
Community Rewards for Positive Involvement	40.6	41.0	37.9	45.0	39.3	
Family Domain	<b><u>Risk Factors</u></b>					
	Poor Family Supervision	37.3	36.5	40.5	39.0	37.8
	Lack of Parental Sanctions for ASBs	23.8	21.4	31.8	25.5	28.1
	Parental Attitudes Favorable Toward ATOD Use	17.1	15.2	25.5	16.7	19.5
	Exposure to Family ATOD Use	46.2	44.4	54.9	44.9	47.4
	Parental Attitudes Favorable Toward ASB	25.5	24.3	29.7	25.8	27.3
	Family (Sibling) History of ASB	32.8	30.3	42.7	32.9	36.9
	<b><u>Protective Factors</u></b>					
	Family Attachment	57.3	57.0	56.5	60.2	58.6
	Family Opportunities for Positive Involvement	44.9	44.7	44.7	46.5	45.5
Family Rewards for Positive Involvement	53.2	52.5	53.2	57.4	56.1	
School Domain	<b><u>Risk Factors</u></b>					
	Low School Commitment	44.5	44.4	44.1	43.7	45.9
	Poor Academic Performance	50.7	51.0	50.8	47.1	50.6
	<b><u>Protective Factors</u></b>					
	School Opportunities for Positive Involvement	44.9	46.0	42.6	42.7	43.1
School Rewards for Positive Involvement	28.2	28.1	28.4	28.3	28.3	

(Table continued on next page)

**TABLE 69 (continued)**  
**Risk and Protective Factors by County (Place of Residence), 2003**

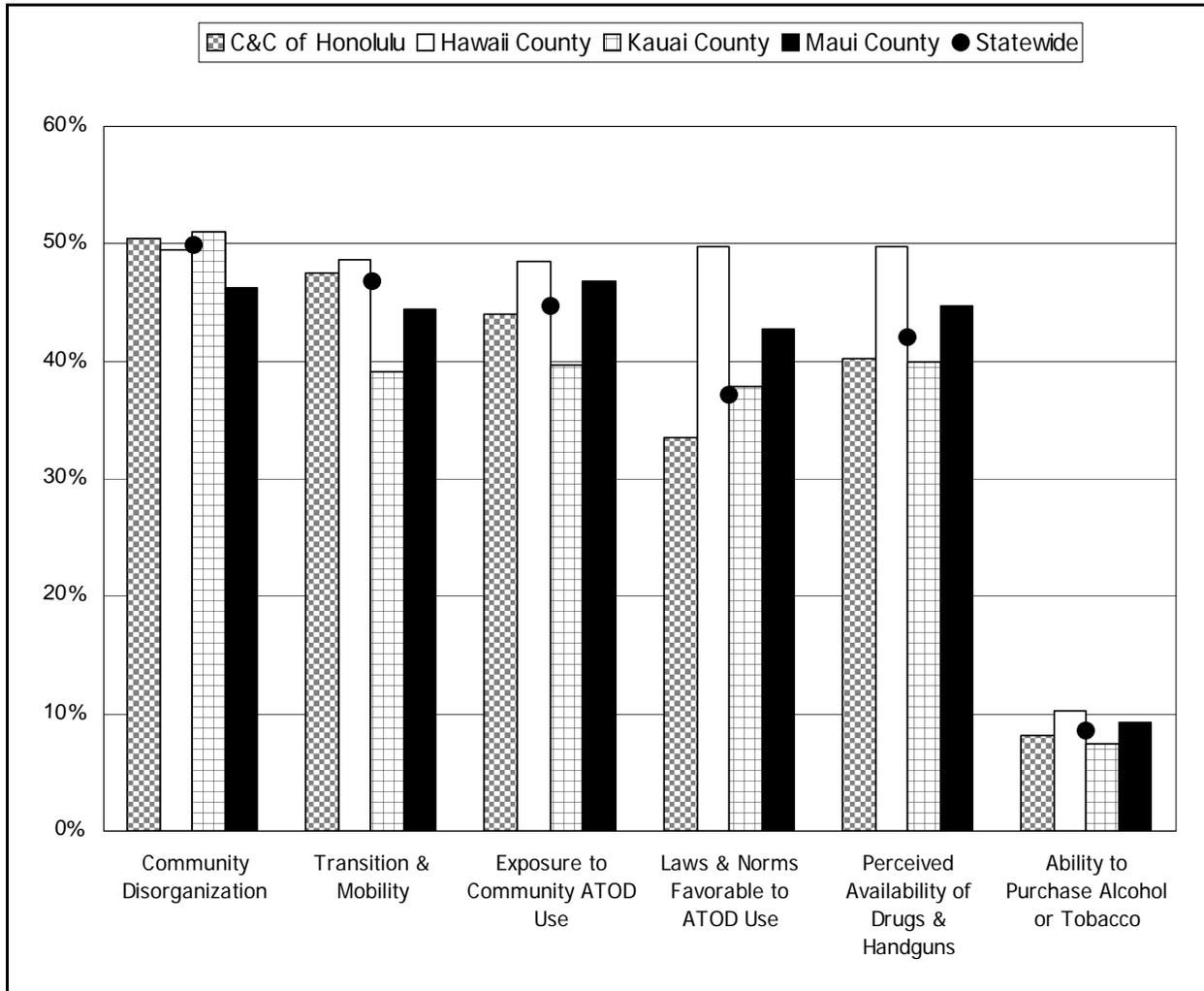
(Entries are percentages %, weighted by grade)

		Statewide	C & C of Honolulu	Hawaii County	Kauai County	Maui County
<b>Peer-Individual Domain</b>	<b><u>Risk Factors</u></b>					
	Early Initiation of Problem Behaviors	35.3	32.5	46.5	34.9	39.0
	Favorable Attitudes Toward ATOD Use	31.6	29.1	41.5	29.3	35.2
	Low Perceived ATOD Use Risk	26.0	24.3	31.2	24.9	29.9
	Antisocial Behaviors (ASBs)	26.0	24.5	33.7	24.2	26.3
	Favorable Attitudes Toward ASB	45.1	43.7	50.1	41.8	48.9
	Friends' ATOD Use	40.2	37.5	49.4	40.2	45.0
	Interaction with Antisocial Peers	46.6	45.0	53.6	46.2	47.5
	Rewards for Antisocial Involvement	40.4	39.2	46.5	35.6	42.0
	Rebelliousness	28.2	28.0	31.6	22.9	27.0
	Sensation Seeking	32.9	31.5	38.4	32.5	34.6
	<b><u>Protective Factors</u></b>					
	Peer Disapproval of ATOD Use	60.1	61.8	53.1	63.3	56.6
	Belief in the Moral Order	47.7	48.2	44.9	51.3	47.5
	Educational Aspirations	40.7	42.5	36.5	35.6	36.5
<b>Indexes</b>	<b><u>Risk Factor Index</u></b>					
	Low Risk (0 to 9 Risk Factors)	60.8	63.3	49.5	63.5	57.3
	Moderate Risk (10 to 14 Risk Factors)	22.6	21.8	26.5	22.1	23.0
	High Risk (15 to 24 Risk Factors)	16.7	14.9	24.0	14.4	19.7
	<b><u>Protective Factor Index</u></b>					
	Low Protection (0 to 3 Protective Factors)	34.6	34.5	36.1	32.4	33.8
	Moderate Protection (4 to 6 Protective Factors)	39.8	39.8	40.4	36.3	40.7
High Protection (7 to 10 Protective Factors)	25.6	25.7	23.5	31.4	25.5	

NOTES: *County* included public, private, and charter school students. *C & C of Honolulu* refers to the City and County of Honolulu. The percentages above represent the percentage of students who are either at risk for or who have protection from developing a substance abuse problem. County estimates are determined by weighting the percentages at each grade level by the county *N*-sizes at that grade level. Statewide percentages are used as comparison points for determining which factors should be targeted in various communities or subgroups. Risk factors above and protective factors below the statewide percentages should be considered critical factors to address in prevention efforts. Some students who meet the cutpoint criteria may not develop a substance abuse problem; however, the majority of the students who meet the cutpoint criteria have or will develop a substance abuse problem. The likelihood of a substance abuse problem increases with the number of risk factors to which a student is exposed and decreases with the number of protective factors to which a student is exposed. The risk and protective factor indexes provide the best indication of degree of risk and protection.

**FIGURE 88**  
**Community Risk Factors by County (Place of Residence), 2003**

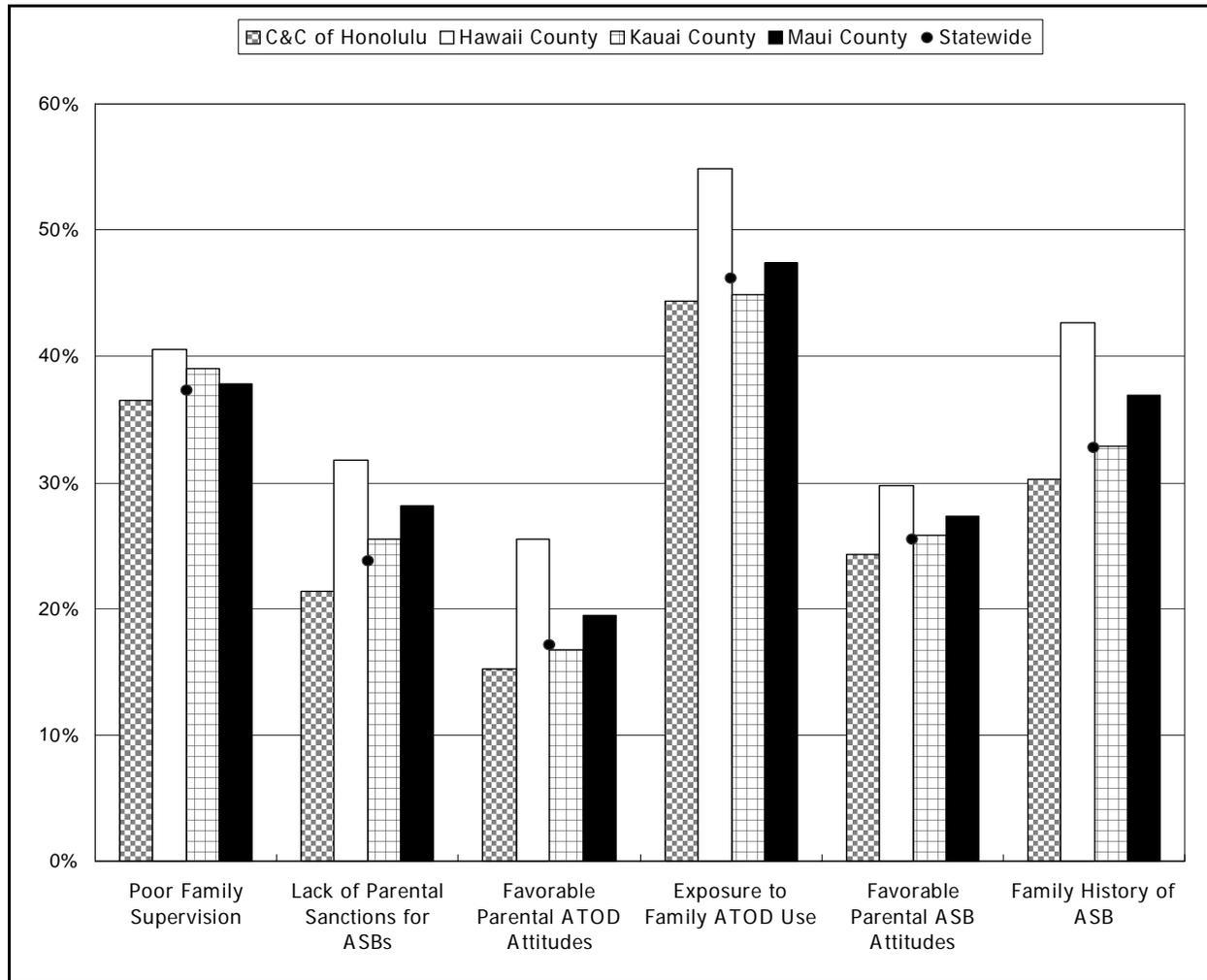
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Community risk factors that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts in each county. Low neighborhood attachment is least prevalent in Kauai County and fairly similar across other counties. Community disorganization is most prevalent in Kauai County, followed by the City & County of Honolulu. Transition and mobility are a bigger issue in the City & County of Honolulu and Hawaii and Maui Counties than in Kauai County. Exposure to community ATOD use is highest in Hawaii County and lowest in the City & County of Honolulu. Laws and norms favorable to ATOD use are substantially higher in Hawaii County than in all other counties. Substances are also perceived as more available and easier to purchase in Hawaii County than in other counties.

**FIGURE 89**  
**Family Risk Factors by County (Place of Residence), 2003**

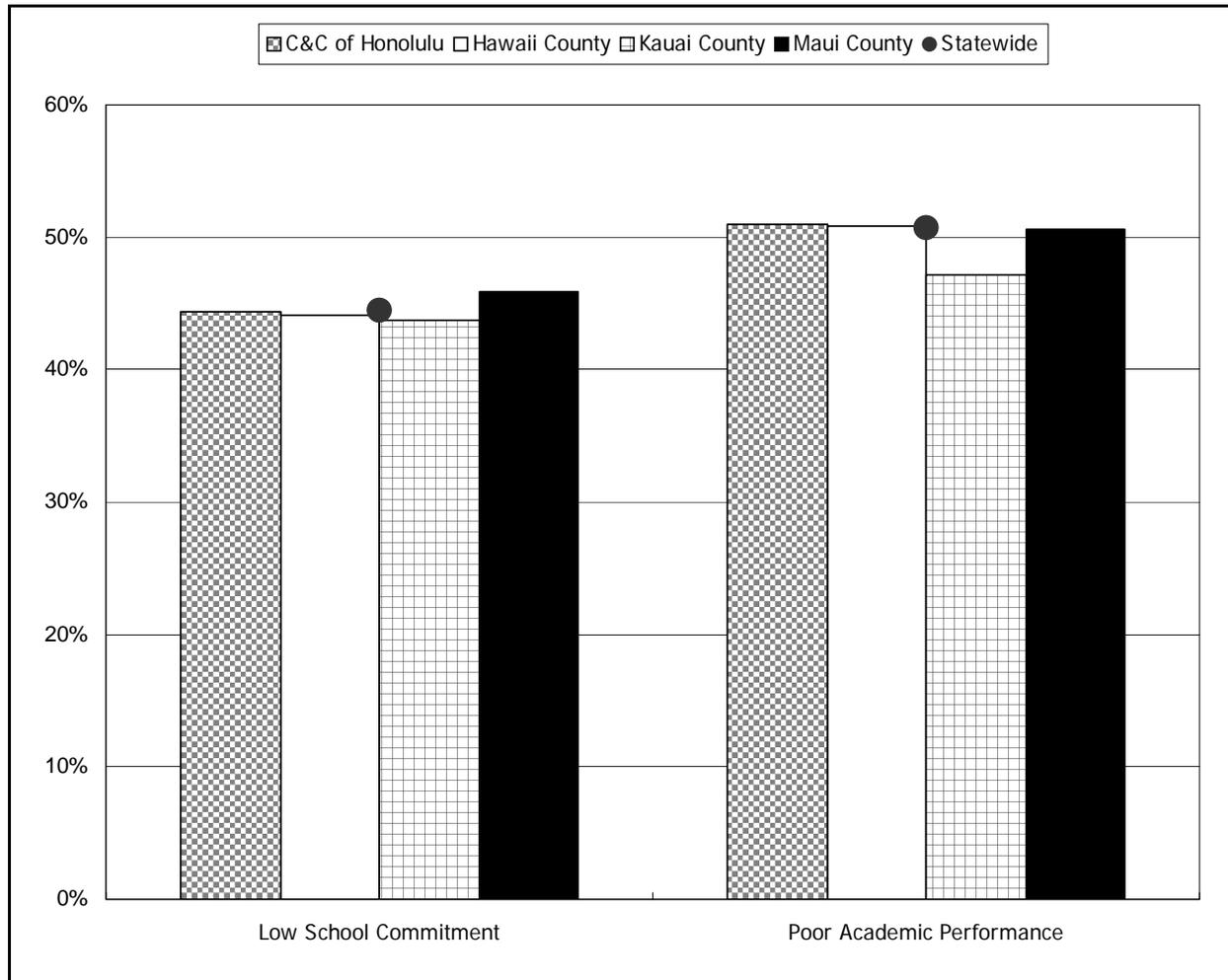
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the family domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts in each county. Implementing prevention programs that target the family would be particularly beneficial in Hawaii County, where risk factors in the family domain are often higher than in other counties. Poor family supervision and family conflict are fairly similar across all counties. Lack of parental sanctions for ASBs is highest in Hawaii County, followed by Maui and Kauai Counties. Parental attitudes favorable toward ATOD use and parental attitudes favorable toward ASB are highest in Hawaii and Maui Counties. Exposure to family ATOD use and a family history of ASB are more prevalent in Hawaii, Kauai, and Maui Counties than in the City & County of Honolulu.

**FIGURE 90**  
**School Risk Factors by County (Place of Residence), 2003**

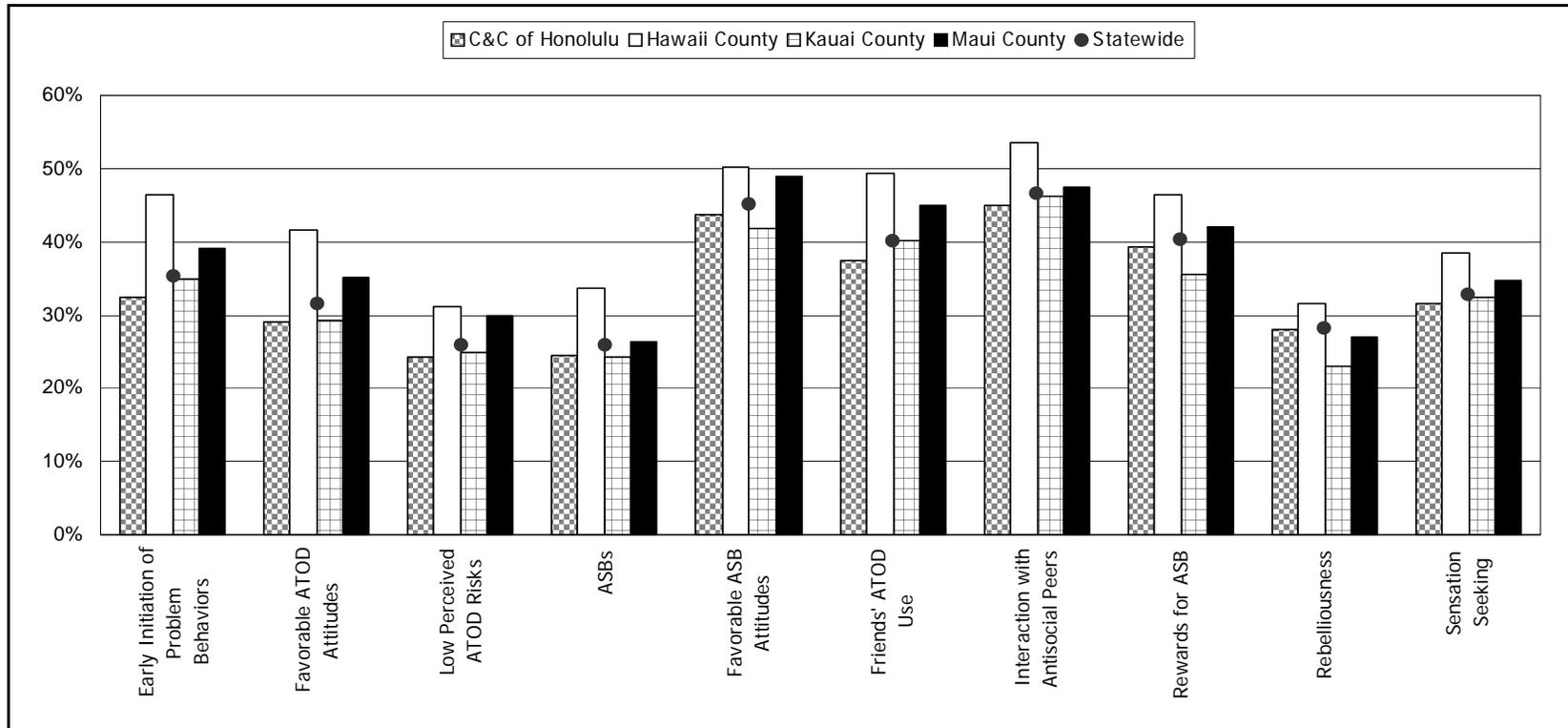
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the school domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts in each county. Low school commitment is pretty similar across counties. However, Hawaii, Kauai, and Maui Counties are all slightly above the statewide average on low school commitment. Poor academic performance is least prevalent in Hawaii County compared to other counties. The City & County of Honolulu and Kauai and Maui Counties are equally high in regards to the percentage of students meeting the risk criteria for poor academic performance.

**FIGURE 91**  
**Peer-Individual Risk Factors by County (Place of Residence), 2003**

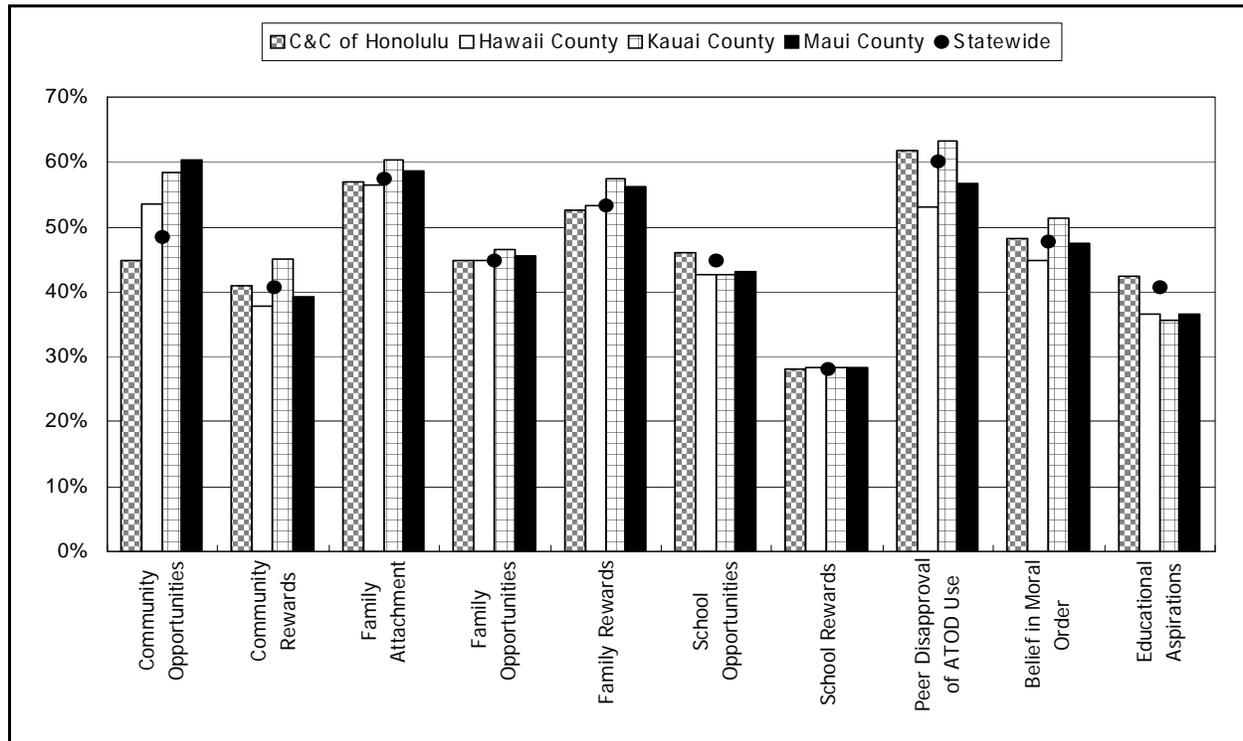
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the peer-individual domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts in each county. Generally speaking, Hawaii County, followed by Maui County, has a much greater proportion of students meeting the risk criteria for each of the peer-individual factors than Kauai County and the City & County of Honolulu. The City & County of Honolulu has a larger percentage of students than Kauai County meeting the risk criteria for favorable ASB attitudes, rewards for ASB, and rebelliousness. Kauai County has a larger percentage of students than the City & County of Honolulu meeting the risk criteria for early initiation of problem behaviors and friends' ATOD use.

**FIGURE 92**  
**Community, Family, School, and Peer-Individual Protective Factors**  
**by County (Place of Residence), 2003**

(Entries are percentages %)



**Findings for Protective Factors:** Prevention efforts must focus on developing and implementing programs designed to enhance community, family, school, and peer-individual protective factors. Any protective factor that is below or nearly equal to statewide percentages (e.g., bars below the dot) should be a top priority of prevention efforts in each county. The City & County of Honolulu has a smaller proportion of students protected in the community and family domains than other counties, but a greater proportion of students protected in the peer-individual domain than other counties. A greater proportion of students in the City & County of Honolulu and Kauai County, compared to other counties, receive protection because of peer disapproval of ATOD use, school opportunities, belief in moral order, and educational aspirations. Hawaii County, on the other hand, has a greater proportion of students protected in the family domains than other counties, but a smaller proportion of students protected in the peer-individual domain. Hawaii County has a much smaller proportion of students protected in the peer-individual domain because of peer disapproval of ATOD use, belief in the moral order, and educational aspirations. Similar to students in Hawaii County, students in Kauai and Maui Counties also seem well protected in the community and family domains, but less protected in the school and peer-individual domains. In sum, prevention efforts in the City & County of Honolulu should focus on increasing protective factors in the community and family domains, whereas prevention efforts in Hawaii, Kauai, and Maui Counties should focus on increasing protective factors in the peer-individual domain.

## Public School District-Level Comparisons

The following section begins by comparing students from different public school districts on the number of risk and protective factors to which they are exposed (i.e., risk and protective factor indexes). Next, district comparisons are made by examining the individual risk and protective factors that are above or below the statewide percentages. Prevention efforts should focus on reducing risk factors that are above the statewide percentages and enhancing protective factors that are below the statewide percentages.

Table 70 lists the percentages of students in each public school district who meet each risk and protective factor, and the percentages of students who are exposed to a high, moderate, or low number of factors. Figures 93 through 96 display each risk factor in each domain so that districts can be compared to one another, as well as to statewide percentages. Figure 97 displays each protective factor in each domain so that districts can be compared to one another, as well as to statewide percentages. Bars represent district percentages, and **dots** represent statewide percentages. Bars above the **dots** on the risk factor figures represent elevated risk, and bars below the **dots** on the protective factor figures represent low levels of protection. Prevention efforts should address risk factors that are higher than statewide averages and protective factors that are lower than statewide averages.

**Overview of Key Findings.** Hawaii District, followed by Windward District, has the largest proportion of students with elevated risk on the risk factor index. Kauai District has the highest proportion of students with elevated protection on the protection factor index. There is a great deal of variation in where districts fall in comparison to statewide percentages on each individual risk and protective factor.

- Comparisons on the *risk factor index* show that Hawaii and Windward Districts have a greater proportion of students who have 15 or more risk factors than other districts. Hawaii District has the largest proportion of students with elevated risk on the risk factor index (24%), followed by Windward District (21%), Maui District (19%), Leeward District (17%), Kauai and Central Districts (15% each), and Honolulu District (14%).
- District differences on the *protective factor index* are less extreme, with Kauai District having the largest percentage of students exposed to 7 or more protective factors (29%), followed by Windward District (26%), Central District (25%), Maui District (24%), Hawaii and Honolulu Districts (22% each), and Leeward District (21%).

For each individual risk and protective factor, a great deal of variation exists among districts. Risk factors that should be a priority in each public school district can be noted by scanning Figures 93 through 96 and looking for bars that are above or equal to the **dots** on the figures. Protective factors that should be prioritized in each public school district can be noted by scanning Figure 97 and by looking for bars that are below or equal to the **dots** in the figure.

**TABLE 70**  
**Risk and Protective Factors by Public School District, 2003**

(Entries are percentages %, weighted by grade)

		Statewide	Honolulu	Central	Leeward	Windward	Hawaii	Kauai	Maui
Community Domain	<b><u>Risk Factors</u></b>								
	Community Disorganization	49.9	51.5	48.8	52.2	50.9	49.6	51.0	46.6
	Transition & Mobility	46.8	45.3	55.8	51.8	46.3	47.2	38.8	41.9
	Exposure to Community ATOD Use	44.7	44.1	45.3	45.8	48.7	49.6	41.0	46.8
	Laws & Norms Favorable to ATOD Use	37.1	34.0	30.1	37.9	37.3	50.2	39.1	42.3
	Perceived Availability of Drugs & Handguns	42.1	36.3	41.0	39.2	46.7	49.2	41.1	43.1
	Ability to Purchase Alcohol or Tobacco	8.5	8.1	8.3	8.3	10.2	9.0	7.9	8.4
	<b><u>Protective Factors</u></b>								
	Community Opportunities for Positive Involvement	48.4	38.2	47.8	41.4	51.0	53.7	58.6	59.5
	Community Rewards for Positive Involvement	40.6	38.4	38.7	40.1	47.1	37.1	43.9	39.1
Family Domain	<b><u>Risk Factors</u></b>								
	Poor Family Supervision	37.3	39.0	35.9	38.0	36.7	40.3	38.6	37.3
	Lack of Parental Sanctions for ASBs	23.8	23.1	20.8	23.3	26.7	31.7	26.7	27.9
	Parental Attitudes Favorable Toward ATOD Use	17.1	14.6	14.9	15.6	19.5	25.3	17.5	18.2
	Exposure to Family ATOD Use	46.2	43.9	44.2	46.5	46.0	55.7	46.0	46.3
	Parental Attitudes Favorable Toward ASB	25.5	22.6	23.7	25.2	30.9	29.6	25.4	26.9
	Family (Sibling) History of ASB	32.8	28.4	30.0	35.1	38.9	43.6	32.7	37.8
	<b><u>Protective Factors</u></b>								
	Family Attachment	57.3	54.2	55.8	54.5	57.8	55.1	59.3	57.3
	Family Opportunities for Positive Involvement	44.9	41.2	44.0	43.2	46.1	44.0	45.8	45.1
Family Rewards for Positive Involvement	53.2	46.3	52.0	48.6	57.2	51.7	55.6	54.5	
School Domain	<b><u>Risk Factors</u></b>								
	Low School Commitment	44.5	42.0	46.9	44.6	47.3	44.5	45.5	45.4
	Poor Academic Performance	50.7	56.0	50.0	56.1	49.7	52.6	47.9	51.6
	<b><u>Protective Factors</u></b>								
	School Opportunities for Positive Involvement	44.9	45.5	44.7	41.1	42.7	40.6	41.1	42.1
School Rewards for Positive Involvement	28.2	29.0	25.8	25.4	28.1	26.4	26.2	26.7	

(Table continued on next page)

**TABLE 70 (continued)**  
**Risk and Protective Factors by Public School District, 2003**

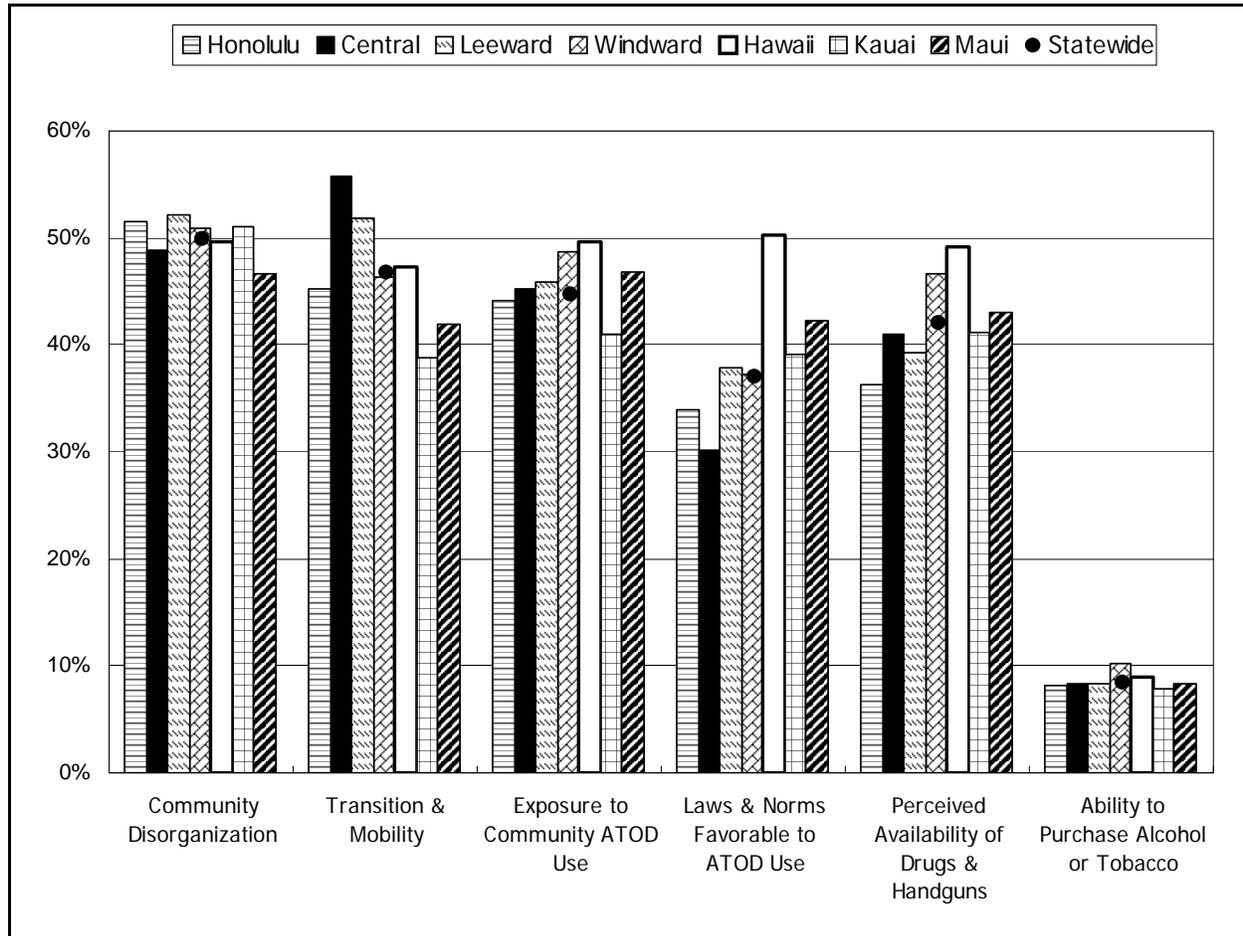
(Entries are percentages %, weighted by grade)

		Statewide	Honolulu	Central	Leeward	Windward	Hawaii	Kauai	Maui
<b>Peer-Individual Domain</b>	<b><u>Risk Factors</u></b>								
	Early Initiation of Problem Behaviors	35.3	31.1	33.4	36.9	40.8	47.1	36.5	39.5
	Favorable Attitudes Toward ATOD Use	31.6	27.8	30.7	28.7	33.5	41.6	30.6	34.1
	Low Perceived ATOD Use Risk	26.0	24.3	23.7	25.7	26.8	30.5	25.6	29.8
	Antisocial Behaviors (ASBs)	26.0	24.4	24.1	28.2	29.8	35.0	25.7	26.2
	Favorable Attitudes Toward ASB	45.1	41.7	46.0	41.8	48.5	49.4	43.1	48.2
	Friends' ATOD Use	40.2	36.7	36.6	40.9	42.8	49.1	42.0	44.8
	Interaction with Antisocial Peers	46.6	44.3	43.1	51.1	49.8	53.6	48.0	47.4
	Rewards for Antisocial Involvement	40.4	36.3	40.0	41.3	43.4	46.4	36.6	40.9
	Rebelliousness	28.2	27.0	25.9	30.1	29.9	31.8	23.9	26.4
	Sensation Seeking	32.9	27.1	31.9	32.3	36.6	37.7	33.7	33.2
	<b><u>Protective Factors</u></b>								
	Peer Disapproval of ATOD Use	60.1	63.4	60.2	60.6	59.5	53.7	61.9	57.6
	Belief in the Moral Order	47.7	50.8	46.9	45.4	45.4	44.4	49.3	47.6
	Educational Aspirations	40.7	37.8	41.8	34.1	40.8	33.0	36.4	33.9
<b>Indexes</b>	<b><u>Risk Factor Index</u></b>								
	Low Risk (0 to 9 Risk Factors)	60.8	65.0	62.9	58.9	55.0	49.1	61.9	57.9
	Moderate Risk (10 to 14 Risk Factors)	22.6	21.2	22.4	24.5	24.3	26.7	23.1	23.5
	High Risk (15 to 24 Risk Factors)	16.7	13.8	14.8	16.6	20.7	24.3	15.0	18.6
	<b><u>Protective Factor Index</u></b>								
	Low Protection (0 to 3 Protective Factors)	34.6	37.9	36.1	39.2	32.4	37.8	33.2	35.0
	Moderate Protection (4 to 6 Protective Factors)	39.8	39.8	39.2	40.1	41.3	40.5	37.8	41.1
High Protection (7 to 10 Protective Factors)	25.6	22.3	24.7	20.8	26.3	21.8	29.0	23.9	

NOTES: The percentages above represent the percentage of students who are either at risk for or who have protection from developing a substance abuse problem. District estimates were determined by weighting the percentage at each grade level by the district *N*-sizes at that grade level. Statewide percentages are used as comparison points for determining which factors should be targeted in various communities or subgroups. Risk factors above and protective factors below the statewide percentages should be considered critical factors to address in prevention efforts. Some students who meet the cutpoint criteria may not develop a substance abuse problem; however, the majority of the students who meet the cutpoint criteria have or will develop a substance abuse problem. The likelihood of a substance abuse problem increases with the number of risk factors to which a student is exposed and decreases with the number of protective factors to which a student is exposed. The risk and protective factor indexes provide the best indication of degree of risk and protection.

**FIGURE 93**  
**Community Risk Factors by Public School District, 2003**

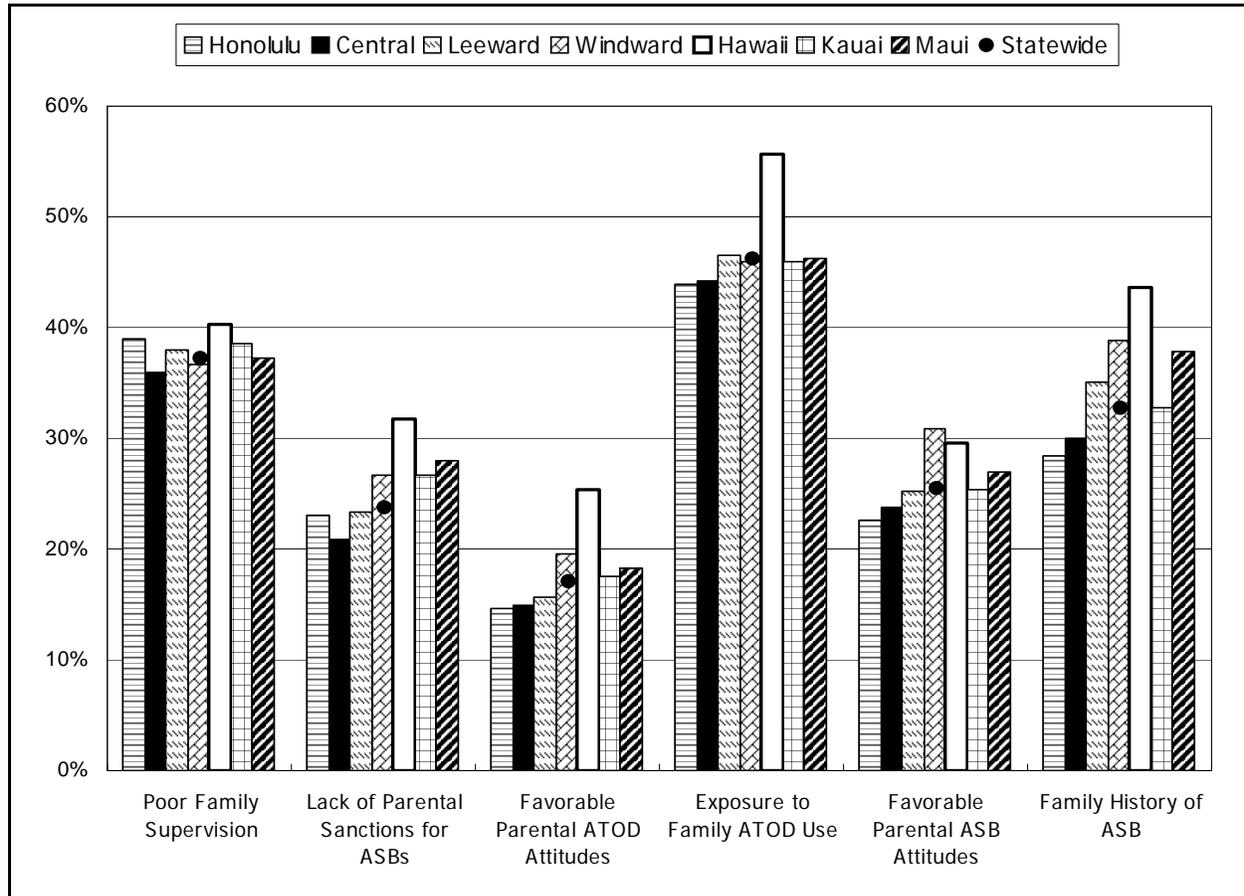
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the community domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts in each district. Community disorganization is fairly similar across most districts, but is most problematic in Honolulu, Leeward, Windward, and Kauai Districts and is least problematic in Maui District. Transition and mobility is most prevalent in Central and Leeward Districts and is least problematic in Kauai and Maui Districts. Exposure to community ATOD use is most problematic in Windward, Hawaii, and Maui Districts and is least problematic in Kauai District. Laws and norms favorable toward ATOD use is much more problematic in Hawaii District and is much less problematic in Honolulu and Central Districts. Perceived availability of drugs and handguns is most problematic in Windward and Hawaii Districts and is least problematic in Honolulu District. The ability to purchase alcohol or tobacco is a risk factor that affects all districts fairly equally.

**FIGURE 94**  
**Family Risk Factors by Public School District, 2003**

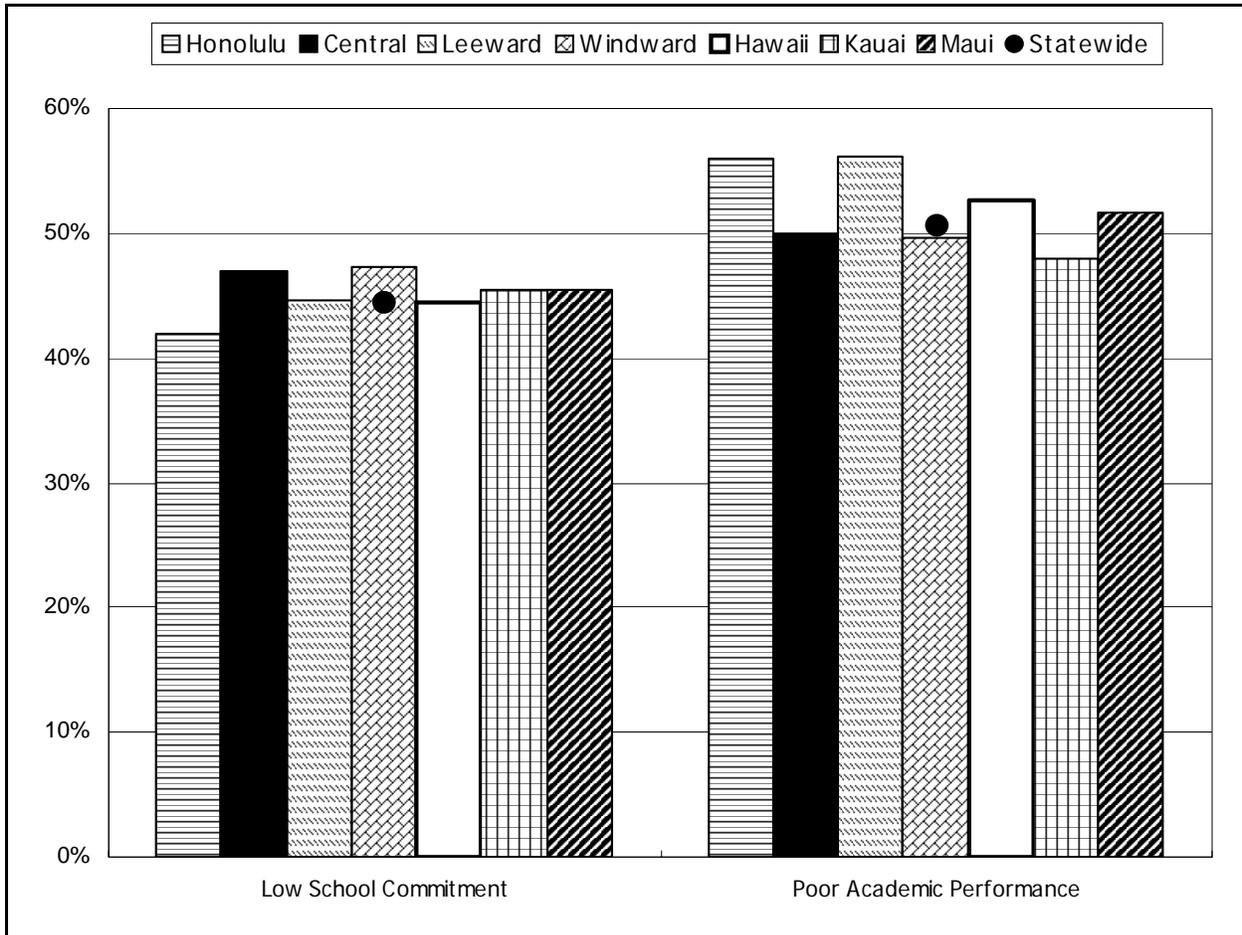
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the family domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts in each district. Across the family domain, Honolulu and Central Districts tend to have the smallest proportion of students meeting the criteria of risk, and Hawaii District typically has the largest proportion of students meeting the criteria of risk. Districts are most similar to one another on the risk factor poor family supervision, which is the one risk factor where Honolulu District students are affected as much, if not more than some of the other districts. Lack of parental sanctions for ASBs, parental attitudes favorable toward ASB, and family history of ASBs are most problematic in Windward, Hawaii, and Maui Districts and are least problematic in Central and Honolulu Districts. Parental attitudes favorable toward ATOD use is highest in Windward and Hawaii District and is lowest in Honolulu, Central, and Leeward Districts. Exposure to family ATOD use is highest in Hawaii District; other districts are fairly similar to one another on this family risk factor.

**FIGURE 95**  
**School Risk Factors by Public School District, 2003**

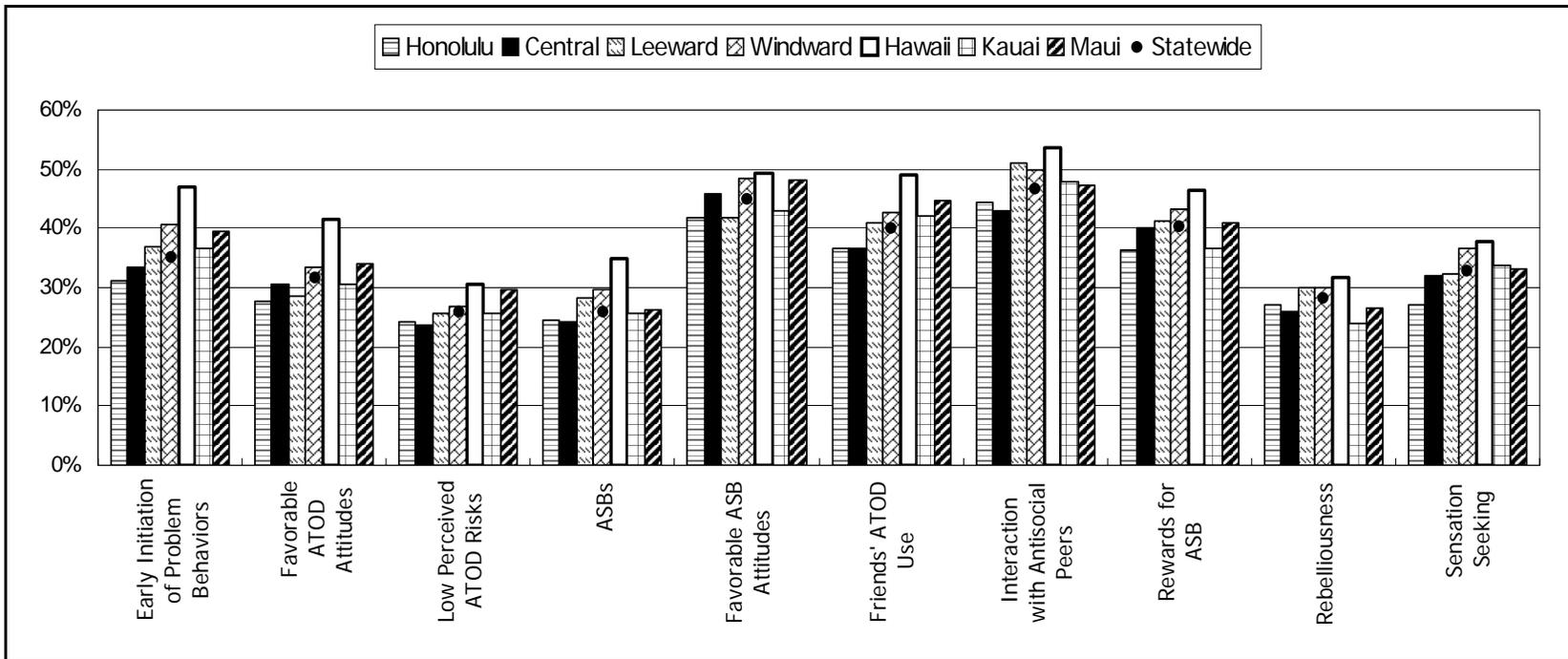
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the school domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts in each district. Low school commitment is most prevalent in Central and Windward Districts and least prevalent in Honolulu District. Poor academic performance is most prevalent in Honolulu and Leeward Districts and is least prevalent in Kauai District.

**FIGURE 96**  
**Peer-Individual Risk Factors by Public School District, 2003**

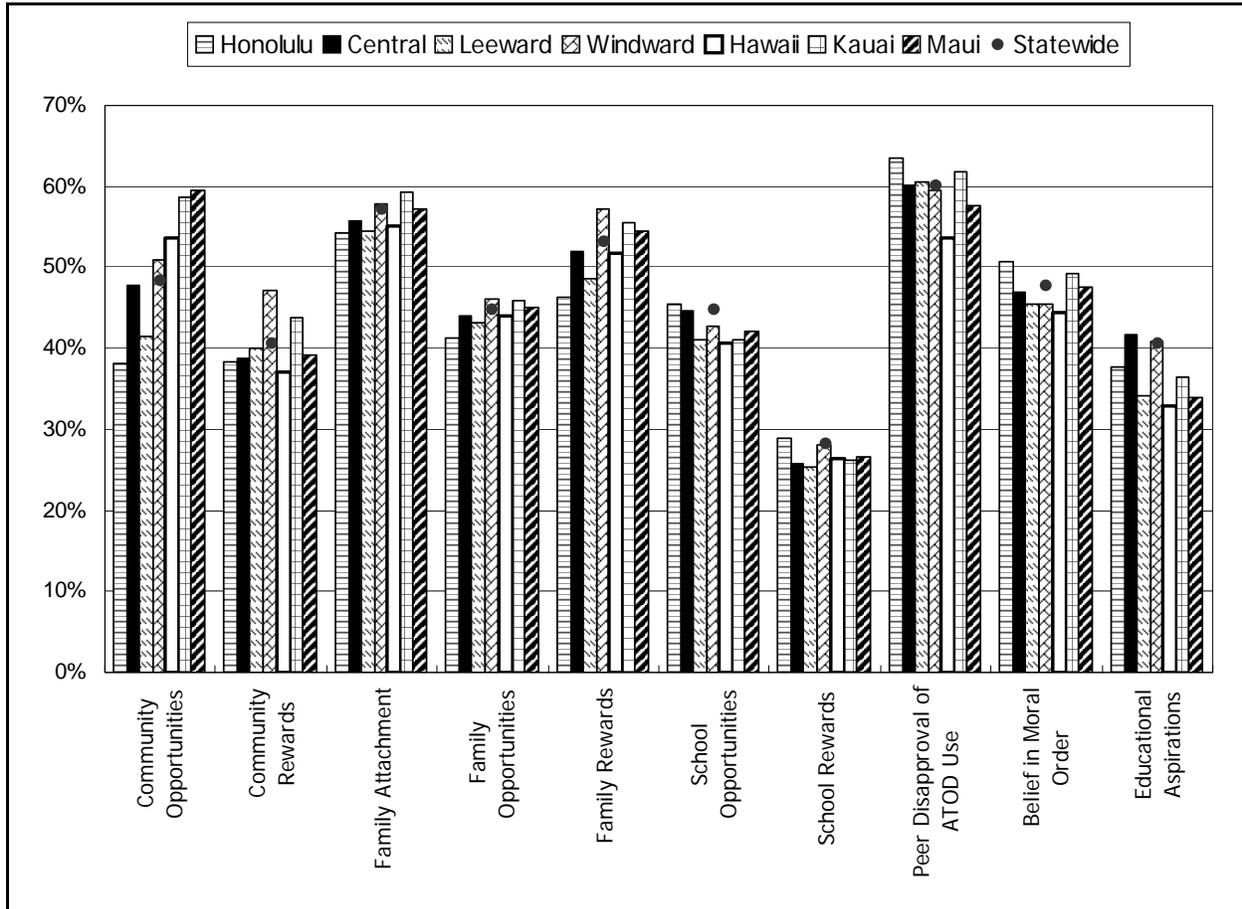
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the peer-individual domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts in each district. Generally speaking, Hawaii District has the greatest proportion of students meeting the risk criteria for each of the peer-individual factors, and Honolulu District typically has the smallest proportion. Favorable ASB attitudes are higher in Central, Windward, Hawaii, and Maui Districts than Honolulu, Leeward, and Kauai Districts. Friends' ATOD use and interaction with antisocial peers are higher in Leeward, Windward, Hawaii, Kauai, and Maui Districts than Honolulu and Central Districts.

**FIGURE 97**  
**Community, Family, School, and Peer-Individual Protective Factors**  
**by Public School District, 2003**

(Entries are percentages %)



**Findings for Protective Factors:** Prevention efforts must focus on developing and implementing programs designed to enhance community, family, school, and peer-individual protective factors. Protective factors that are below or nearly equal to statewide percentages (e.g., bars below the **dot**) should be a top priority of prevention efforts in each county. Honolulu District has a smaller proportion of students protected in the community and family domains than other districts, but typically has a greater proportion of students protected in the school and peer-individual domain than other districts. Hawaii District has a smaller proportion of students protected by community rewards for positive involvement, school opportunities for positive involvement, peer disapproval of ATOD use, belief in moral order, and education aspirations than other districts. Leeward District is similar to Hawaii District in that a smaller proportions of students in these districts, compared to other districts, meet the protection criteria on a variety of factors. Central District students are weakest in the areas of community rewards for positive involvement, school rewards for positive involvement, and belief in moral order.

### **Trends in Problematic Risk and Protective Factors by Public School District, 2000-2003**

Table 71 summarizes the county- and district-level comparisons by placing a date ('00, '02, '03, or all) to indicate the year in which the risk or protective factor was problematic. Prevention efforts should focus on factors that have become or that remain problematic in 2003.

In this section, each district is addressed to summarize where prevention efforts should be directed in various communities. Since the district grouping, versus the county grouping, addresses a larger number of communities and better explains what is happening in various parts of Oahu, the focus of this summary is on district, rather than on county. Key findings are first summarized for each district. Next, factors within each domain are listed that need to be addressed in prevention efforts directed at adolescents from the district in question.

**Honolulu District.** Prevention efforts in Honolulu District should focus primarily on bolstering protective factors in the community and family domains. Unlike other districts, Honolulu District has very few risk factors above statewide averages. The only risk factors in Honolulu District that are above the statewide percentages in 2003 are community disorganization, poor family supervision, and poor academic performance.

- In the *community domain*, prevention efforts directed at adolescents from Honolulu District should focus on (1) community disorganization, (2) community opportunities for positive involvement, and (3) community rewards for positive involvement. Each of these factors were problematic in all three survey years. Ability to purchase alcohol or tobacco was problematic in 2002, but was not elevated in 2003.
- In the *family domain*, prevention efforts directed at adolescents from Honolulu District should primarily focus on (1) poor family supervision, (2) family attachment, (3) family opportunities for prosocial involvement, and (4) family rewards for prosocial involvement. All three protective factors in the family domain have been elevated in each of the survey years. The risk factor, poor family supervision, was elevated in 2000 and is again elevated in 2003.
- In the *school domain*, prevention efforts directed at adolescents from Honolulu District should focus primarily on poor academic performance. Although school opportunities for positive involvement and school rewards for positive involvement were elevated in 2000 and 2002, these factors were not elevated in 2003.
- Honolulu District, unlike other districts, has very few problematic risk and protective factors in the *peer-individual domain*. Fewer students in Honolulu District than statewide, met the protective factor criteria for educational aspirations. Keep in mind that the category of Honolulu District includes only public school students in Honolulu District. As noted earlier, substantially more private school students than public school students meet the protective criteria for educational aspirations.

**Central District.** Central District had a big drop in the number of problematic risk factors from 2000 to 2002. However, in 2003, several of the previous problematic risk factors became problematic again.

- In the *community domain*, prevention efforts directed at adolescents from Central District should focus on (1) transition and mobility, (2) exposure to community ATOD use, (3) community opportunities for positive involvement, and (4) community rewards for positive involvement. Transition and mobility, and community rewards for positive involvement have been problematic in Central District over all three survey years.
- In the *family domain*, Central District had all three protective factors return to being problematic: (1) family attachment, (2) family opportunities for prosocial involvements, and (3) family rewards for prosocial involvement. Similar to 2002, Central District doesn't have any family domain risk factors that are problematic in 2003.
- In the *school domain*, prevention efforts directed at adolescents from Central District should focus on (1) low school commitment, (2) school opportunities for positive involvement, and (3) school rewards for positive involvement. These three factors were also problematic in 2000.
- In the *peer-individual domain*, prevention efforts should focus on (1) favorable attitudes toward ASB and (2) belief in the moral order. Belief in the moral order is a protective factor that has shown up as problematic in all three survey years.

**Leeward District.** Leeward District had more problematic risk and protective factors in 2002 than in 2000, and the number increased again in 2003. Across each domain, Leeward District has a large number of problematic factors and many of them have show up as problematic in all three survey years.

- In the *community domain*, prevention efforts directed at adolescents from Leeward District should focus on (1) community disorganization, (2) transition & mobility, (3) exposure to community ATOD use, (4) laws and norms favorable to ATOD use, (5) community opportunities for positive involvement, and (6) community rewards for positive involvement.
- In the *family domain*, prevention efforts directed at adolescents from Leeward District should focus on (1) poor family supervision, (2) exposure to family ATOD use, (3) family history of ASB, (4) family attachment, (5) family opportunities for prosocial involvement, and (6) family rewards for prosocial involvement.
- In the *school domain*, prevention efforts in Leeward District should focus on each of the risk and protective factors since each was elevated.
- In the *peer-individual domain*, prevention efforts in Leeward District should focus on (1) early initiation of problem behaviors, (2) antisocial behaviors, (3) friends' ATOD use, (4) interaction with antisocial peers, (5) rewards for antisocial involvement, (6) rebelliousness, (7) belief in moral order, and (8) educational aspirations.

## Chapter 11

**Windward District.** Similar to previous years, Windward District has some of the most problematic risk and protective factors, compared to other districts. Virtually every risk factor in every domain is above the statewide average in Windward District. However, several factors that were problematic in Windward District in 2002 are no longer problematic in 2003, including transition and mobility, poor family supervision, exposure to family ATOD use, family attachment, family rewards for prosocial involvement, poor academic performance, and educational aspirations.

- In the *community domain*, prevention efforts directed at adolescents from Windward District should focus on (1) community disorganization, (2) exposure to community ATOD use, (3) laws and norms favorable to ATOD use, (4) perceived availability of drugs and handguns, and (5) ability to purchase alcohol or tobacco.
- In the *family domain*, prevention efforts directed at adolescents from Windward District should focus on (1) lack of parental sanctions for ASBs, (2) parental attitudes favorable toward ATOD use, (3) parental attitudes favorable toward ASB, and (4) family history of ASB. Windward District witnessed some of the biggest improvements in 2003 in the family domain; four previous problematic factors are below statewide averages in 2003.
- In the *school domain*, all risk and protective factors have been problematic in Windward District at some point and only poor academic performance showed improvement in 2003. Thus, prevention efforts in Windward District should focus on all school risk and protective factors.
- Similar to the other domains, in the *peer-individual domain*, virtually every factor is problematic in Windward District. The exception is educational aspiration, which was problematic in 2000 and 2002, but was below statewide averages in 2003.

**Hawaii District.** Hawaii District, like Windward District, has more problematic risk and protective factors in 2003 in comparison to other districts. Virtually every risk factor in every domain is above statewide averages in Hawaii District. Hawaii District has only one problematic protective factor in the community domain, but all of the protective factors in the other domains are above the statewide averages.

- In the *community domain*, prevention efforts directed at adolescents from Hawaii District should focus on (1) transition and mobility, (2) exposure to community ATOD use, (3) laws and norms favorable to ATOD use, (4) perceived availability of drugs and handguns, (5) ability to purchase alcohol and tobacco, and (6) community rewards for positive involvement.
- In the *family domain* and the *school domain*, every risk factor and every protective factor is listed as problematic in Hawaii District in 2003.
- In the *peer-individual domain*, every factor has been problematic in all three survey years. Thus, prevention efforts could be strengthened by focusing on any of the peer-individual factors.

**Kauai District.** Kauai District saw improvements in more areas than any of the other districts. The only domain not showing drastic improvements in Kauai District was the school domain.

- In the *community domain*, prevention efforts directed at adolescents from Kauai District should focus on (1) community disorganization and (2) laws and norms favorable to ATOD use. Improvements were noted in 2003 for exposure to community ATOD use and perceived availability of drugs and handguns.
- In the *family domain*, prevention efforts directed at adolescents from Kauai District should focus on (1) poor family supervision, (2) lack of parental sanctions for ASBs, and (3) parental attitudes favorable toward ATOD use. Several family factors that were problematic in Kauai District in 2002 are no longer problematic in 2003.
- In the *school domain*, every factor was problematic in 2003 for Kauai District, except for poor academic performance.
- Over the years, Kauai District has had numerous problematic risk factors in the *peer-individual domain*, with only slightly fewer risk factors than Windward, Hawaii, and Maui Districts. However, in 2003, many of the problematic risk factors from years past are no longer problematic. Prevention efforts directed at adolescents from Kauai District should focus on the following peer-individual domain factors which have remained problematic over the years: (1) early initiation of problem behaviors, (2) friends' ATOD use, (3) interaction with antisocial peers, (4) sensation seeking, and (5) educational aspirations.

**Maui District.** Maui District has fewer problematic factors in the community domain than some of the other districts, but is as high, if not higher, in the number of problematic factors in the other domains.

- In the *community domain*, prevention efforts directed at adolescents from Maui District should focus on (1) exposure to community ATOD use, (2) laws and norms favorable to ATOD use, (3) perceived availability of drugs and handguns, and (4) community rewards for positive involvement.
- In the *family domain*, Maui District has more problematic risk factors than most other districts. Prevention efforts should focus on all of the family risk factors, as well as increasing the family attachment protective factor.
- In the *school domain*, every factor has been problematic over each of the survey years for Maui District and, thus, should be addressed in prevention efforts.
- Maui District has more problematic factors in the *peer-individual domain* than any other district. Every risk and protective factor was problematic in 2003, except for rebelliousness.

**TABLE 71**

**Trends in Problematic Risk and Protective Factors by County (Place of Residence) and Public School District:  
Identification of High Risk Factors and Low Protective Factors in 2000, 2002, and 2003**

( '00, '02, '03, and *all* indicate year in which risk/protective factor was problematic)

Risk/Protective Factors	County (Public & Private)				Public School District						
	C & C of Honolulu	Hawaii County	Kauai County	Maui County	Honolulu District	Central District	Leeward District	Windward District	Hawaii District	Kauai District	Maui District
<b>Community Domain: Risk Factors</b>											
Community Disorganization	all	'02	'03		all		all	'03	'02	'03	
Transition & Mobility	all	'00, '03		'00		all	all	'00, '02	'03		
Exposure to Community ATOD Use		all	'00, '02	all		'00, '03	all	all	all	'00, '02	all
Laws and Norms Favorable to ATOD Use		all	all	all			all	all	all	all	all
Perceived Availability of Drugs and Handguns		all	'00, '02	'02, '03		'00		all	all	'00, '02	'02, '03
Ability to Purchase Alcohol or Tobacco	'02	all		'03	'02	'00		all	'00, '03		
<b>Community Domain: Protective Factors</b>											
Community Opportunities for Positive Involvement	all				all	all	all	'00			
Community Rewards for Positive Involvement	'00, '02	'03		'03	all	'00, '03	all		'03		'03
<b>Family Domain: Risk Factors</b>											
Poor Family Supervision		all	all	all	'00, '03		'00, '03	'02	all	all	all
Lack of Parental Sanctions for ASBs		all	all	all				all	all	all	all
Parental Attitudes Favorable Toward ATOD Use		all	'00, '02	all				all	all	all	all
Exposure to Family ATOD Use		all	'00, '02	all			'02, '03	'00, '02	all	'00, '02	all
Parental Attitudes Favorable Toward ASB		all	'00, '03	all		'00		all	all	'00	'02, '03
Family (Sibling) History of ASB		all	all	all			'02, '03	all	all	'00, '02	all
<b>Family Domain: Protective Factors</b>											
Family Attachment	all	'03			all	'00, '03	all	'02	'03		'03
Family Opportunities for Prosocial Involvement	all	'03	'02		all	'00, '03	'00, '03		'03	'02	
Family Rewards for Prosocial Involvement	all	'03			all	'00, '03	all	'02	'03		'02

(Table continued on next page)

**TABLE 71 (continued)**  
**Trends in Problematic Risk and Protective Factors by County (Place of Residence) and Public School District:**  
**Identification of High Risk Factors and Low Protective Factors in 2000, 2002, and 2003**

('00, '02, '03, and *all* indicate year in which risk/protective factor was problematic)

Risk/Protective Factors	County (Public & Private)				Public School District						
	C & C of Honolulu	Hawaii County	Kauai County	Maui County	Honolulu District	Central District	Leeward District	Windward District	Hawaii District	Kauai District	Maui District
<b>School Domain: Risk Factors</b>											
Low School Commitment		'00, '02	'00, '02	all		'00, '03	'03	all	all	all	all
Poor Academic Performance	all	'03	'02		all		all	'00, '02	'03	'02	all
<b>School Domain: Protective Factors</b>											
School Opportunities for Positive Involvement		all	all	all	'00, '02	'00, '03	'03	all	all	all	all
School Rewards for Positive Involvement	'03		'02	'00, '02	'00, '02	all	all	'02, '03	all	all	all
<b>Peer-Individual Domain: Risk Factors</b>											
Early Initiation of Problem Behaviors		all	'00, '02	all			all	all	all	all	all
Favorable Attitudes Toward ATOD Use		all	'00, '02	all		'00		all	all	'00, '02	all
Low Perceived ATOD Use Risk		all	'00, '02	all			'02	'02, '03	all	'00, '02	all
Antisocial Behaviors (ASBs)		all	'00, '02	all		'00	all	all	all	'00, '02	all
Favorable Attitudes Toward ASB		all	'00, '02	all		'00, '03		all	all	'00	all
Friends' ATOD Use		all	all	all			'02, '03	all	all	all	all
Interaction with Antisocial Peers		all	'02	all		'00	all	all	all	'02, '03	all
Rewards for Antisocial Involvement		all	'00, '02	all		'00	'02, '03	all	all	'00, '02	all
Rebelliousness		all	'00	'02		'00	all	all	all	'00	'02
Sensation Seeking		all	'00, '02	all		'00		all	all	all	all
<b>Peer-Individual Domain: Protective Factors</b>											
Peer Disapproval of ATOD Use		all	'00, '02	all				all	all	'00, '02	all
Belief in the Moral Order		all	'00, '02	all		all	'03	all	all	'00, '02	all
Educational Aspirations		all	all	all	all	'00	all	'00, '02	all	all	all

NOTES: Dates ('00=2000; '02=2002; '03=2003; all=all three years) indicate risk factors that are higher than or equal to statewide percentages, and protective factors that are lower than or equal to statewide percentages in that particular year. Prevention efforts need to focus on factors that remain or have become problematic in 2003.

## Sex Differences

The following section begins by comparing male and female students on the number of risk and protective factors to which they are exposed (i.e., risk and protective factor indexes). Next, sex differences are examined by comparing males to females on individual risk and protective factors. Prevention efforts directed at each subgroup should focus on reducing risk factors that are above the statewide percentages and enhancing protective factors that are below the statewide percentages.

Table 72 lists the percentages of male and female students who meet each risk and protective factor, and the percentages of male and female students who are exposed to a high, moderate, or low number of factors. Figures 98 through 101 display each risk factor in each domain so that males and females can be compared to each other, as well as to statewide percentages. Figure 102 displays each protective factor in each domain so that males and females can be compared to each other, as well as to statewide percentages. Bars represent subgroup percentages, and **dots** represent statewide percentages. Bars above the **dots** on the risk factor figures represent elevated risk, and bars below the **dots** on the protective factor figures represent low levels of protection. Prevention efforts should address risk factors that are higher than statewide averages and protective factors that are lower than statewide averages.

Table 74 (pages 522-523) summarizes all the information regarding sex and ethnic comparisons in one table by highlighting risk and protective factors that should be the focus of prevention efforts for each subgroup. The table places a date ('00, '02, '03, or all) to indicate the year in which the risk or protective factor was problematic. Prevention efforts should focus on factors that have become or that remain problematic in 2003.

**Overview of Key Findings.** A greater proportion of males than females have elevated risk and lower resiliency because of the number of risk and protective factors to which they are exposed. Males tend to have more elevated risk factors in the school and peer-individual domain, whereas females tend to have more elevated risk factors in the community and family domain. Females have more elevated protective factors than males, and a greater percentage of females than males are exposed to large numbers of protective factors. Males and females, however, are similar to one another on several risk and protective factors.

- Comparisons on the *risk factor index* show that a slightly larger proportion of males than females are exposed to 15 or more risk factors (17% vs. 16%). More males (25%) than females (20%) are also exposed to moderate amounts of risk factors (10 to 14 risk factors). The percentages of males and females at low, moderate, and high risk based on the risk factor index are provided in Table 72 on page 507.
- Comparisons on the *protective factor index* show that more females than males are exposed to 7 to 10 protective factors (28% vs. 22%), and more females than males are exposed to 4 to 6 protective factors (40% vs. 39%). More males than females, on the other hand, are exposed to 3 or fewer protective factors (38% vs 31%).

- Figure 98, related to community risk factors, and Figure 102, related to protective factors, show that in the **community domain** prevention efforts directed at male adolescents should focus on the following problematic factors: (1) community disorganization, (2) laws and norms favorable to ATOD use, (3) perceived availability of drugs and handguns, (4) ability to purchase alcohol and tobacco, (5) community opportunities for positive involvement, and (6) community rewards for positive involvement. Prevention efforts directed at female adolescents, on the other hand, should focus on (1) transition & mobility and (2) exposure to community ATOD use. Males and females are fairly similar to one another on perceived availability of drugs and handguns, ability to purchase alcohol and tobacco, and community rewards for positive involvement.
- Figure 99, related to family risk factors, and Figure 102, related to protective factors, show that in the **family domain** prevention efforts directed at male adolescents should focus on (1) poor family supervision, (2) parental attitudes favorable toward ASB, (3) family opportunities for prosocial involvement, and (4) family rewards for prosocial involvement. Prevention efforts for female adolescents, on the other hand, should focus on (1) lack of parental sanctions for ASBs, (2) parental attitudes favorable toward ATOD use, (3) exposure to family ATOD use, (4) family history of ASB, and (5) family attachment. Males and females are similar to one another on lack of parental sanctions for ASBs and parental attitudes favorable toward ATOD.
- Figure 100, related to school risk factors, and Figure 102, related to protective factors, show that every risk and protective factor in the **school domain** is problematic for male adolescents but not for female adolescents. Males, however, are only slightly less protected on school reward for positive involvement.
- Figure 101, related to peer-individual risk factors, and Figure 102, related to protective factors, show that male adolescents have more problematic risk and protective factors in the **peer-individual domain** than female adolescents. The exceptions are for favorable attitudes toward ATOD use and friends' ATOD use, where the percentages of females meeting the risk criteria are slightly higher than the male percentages. Thus, prevention efforts directed at males should focus on a variety of risk factors in the peer-individual domain and prevention efforts directed at females should focus on favorable ATOD attitudes and friends' ATOD use.
- Table 74 summarizes all the problematic risk and protective factors in 2000, 2002, and 2003 for males and females to illustrate where prevention is currently needed (i.e., problematic in 2003) and where prevention efforts have been effective (i.e., problematic in 2000 or 2002, but not in 2003).

**TABLE 72**  
**Risk and Protective Factors by Sex, 2003**

(Entries are percentages %, weighted by grade)

		Statewide	Male	Female
Community Domain	<b><u>Risk Factors</u></b>			
	Community Disorganization	49.9	51.3	48.7
	Transition & Mobility	46.8	45.2	48.2
	Exposure to Community ATOD Use	44.7	42.0	47.1
	Laws & Norms Favorable to ATOD Use	37.1	37.5	36.2
	Perceived Availability of Drugs & Handguns	42.1	42.1	41.7
	Ability to Purchase Alcohol or Tobacco	8.5	8.6	8.3
	<b><u>Protective Factors</u></b>			
	Community Opportunities for Positive Involvement	48.4	46.8	49.8
	Community Rewards for Positive Involvement	40.6	39.7	41.0
Family Domain	<b><u>Risk Factors</u></b>			
	Poor Family Supervision	37.3	42.5	32.5
	Lack of Parental Sanctions for ASBs	23.8	23.1	23.9
	Parental Attitudes Favorable Toward ATOD Use	17.1	16.7	17.1
	Exposure to Family ATOD Use	46.2	44.7	47.9
	Parental Attitudes Favorable Toward ASB	25.5	27.0	24.1
	Family (Sibling) History of ASB	32.8	28.4	36.9
	<b><u>Protective Factors</u></b>			
	Family Attachment	57.3	59.3	55.5
	Family Opportunities for Positive Involvement	44.9	44.1	45.5
Family Rewards for Positive Involvement	53.2	52.2	54.0	
School Domain	<b><u>Risk Factors</u></b>			
	Low School Commitment	44.5	49.1	39.9
	Poor Academic Performance	50.7	54.9	45.8
	<b><u>Protective Factors</u></b>			
	School Opportunities for Positive Involvement	44.9	42.3	47.7
School Rewards for Positive Involvement	28.2	27.4	28.9	

(Table continued on next page)

**TABLE 72 (continued)**  
**Risk and Protective Factors by Sex, 2003**

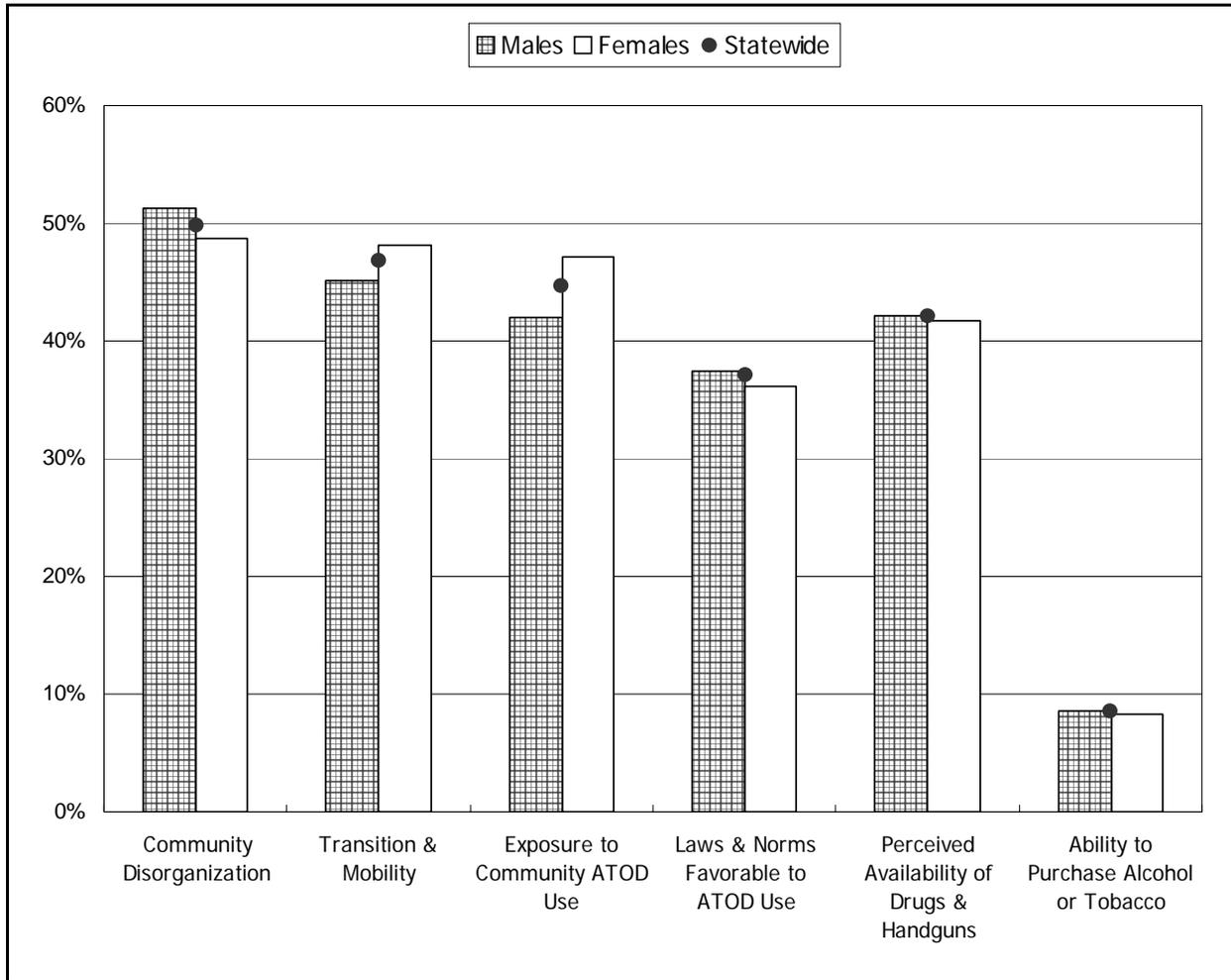
(Entries are percentages %, weighted by grade)

		Statewide	Male	Female
<b>Peer-Individual Domain</b>	<b><u>Risk Factors</u></b>			
	Early Initiation of Problem Behaviors	35.3	38.3	32.3
	Favorable Attitudes Toward ATOD Use	31.6	30.8	31.6
	Low Perceived ATOD Use Risk	26.0	28.5	23.4
	Antisocial Behaviors (ASBs)	26.0	30.6	20.9
	Favorable Attitudes Toward ASB	45.1	48.1	42.0
	Friends' ATOD Use	40.2	37.7	41.7
	Interaction with Antisocial Peers	46.6	51.8	40.8
	Rewards for Antisocial Involvement	40.4	45.3	35.4
	Rebelliousness	28.2	29.8	26.6
	Sensation Seeking	32.9	38.5	27.3
	<b><u>Protective Factors</u></b>			
	Peer Disapproval of ATOD Use	60.1	55.4	64.7
	Belief in the Moral Order	47.7	41.5	53.3
Educational Aspirations	40.7	34.4	46.7	
<b>Indexes</b>	<b><u>Risk Factor Index</u></b>			
	Low Risk (0 to 9 Risk Factors)	60.8	57.7	63.7
	Moderate Risk (10 to 14 Risk Factors)	22.6	25.2	20.3
	High Risk (15 to 24 Risk Factors)	16.7	17.1	16.0
	<b><u>Protective Factor Index</u></b>			
	Low Protection (0 to 3 Protective Factors)	34.6	38.2	31.3
	Moderate Protection (4 to 6 Protective Factors)	39.8	39.3	40.4
High Protection (7 to 10 Protective Factors)	25.6	22.4	28.4	

NOTES: The percentages above represent the percentage of students who are either at risk for or who have protection from developing a substance abuse problem. Estimates were determined by weighting the percentage at each grade level by the statewide *N*-sizes at that grade level. Statewide percentages are used as comparison points for determining which factors should be targeted in various communities or subgroups. Risk factors above and protective factors below the statewide percentages should be considered critical factors to address in prevention efforts. Some students who meet the cutpoint criteria may not develop a substance abuse problem; however, the majority of the students who meet the cutpoint criteria have or will develop a substance abuse problem. The likelihood of a substance abuse problem increases with the number of risk factors to which a student is exposed and decreases with the number of protective factors to which a student is exposed. The risk and protective factor indexes provide the best indication of degree of risk and protection. A portion of respondents did not indicate their gender on the survey. The statewide percentage are based on all students, regardless of whether they marked their gender on the survey. Thus, there will be some instances when both males and females are above or below the statewide percentage.

**FIGURE 98**  
**Community Risk Factors by Sex, 2003**

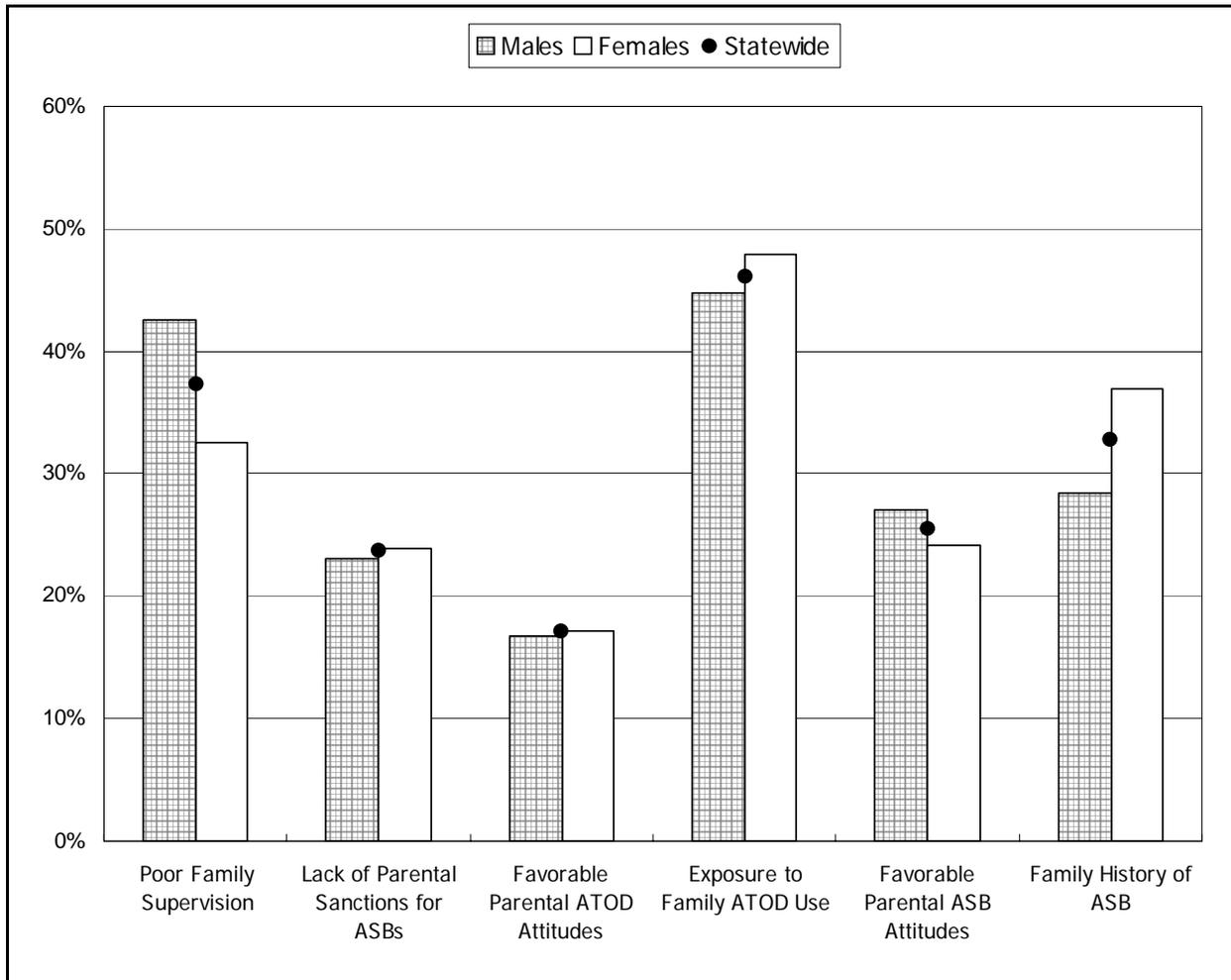
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the community domain that are higher than or nearly equal to statewide percentages (e.g., bars above the dot) should be a top priority of prevention efforts. The figure illustrates which community risk factors are most prevalent among males versus females. More males than females are exposed to community disorganization, and laws and norms favorable to ATOD use. More females than males are exposed to transition and mobility and exposure to community ATOD use. For the most part, males and females are equally exposed to various risk factors in the community domain. Sex differences related to laws and norms favorable to ATOD use, perceived availability of drugs and handguns, and ability to purchase alcohol or tobacco are virtually nonexistent.

**FIGURE 99**  
**Family Risk Factors by Sex, 2003**

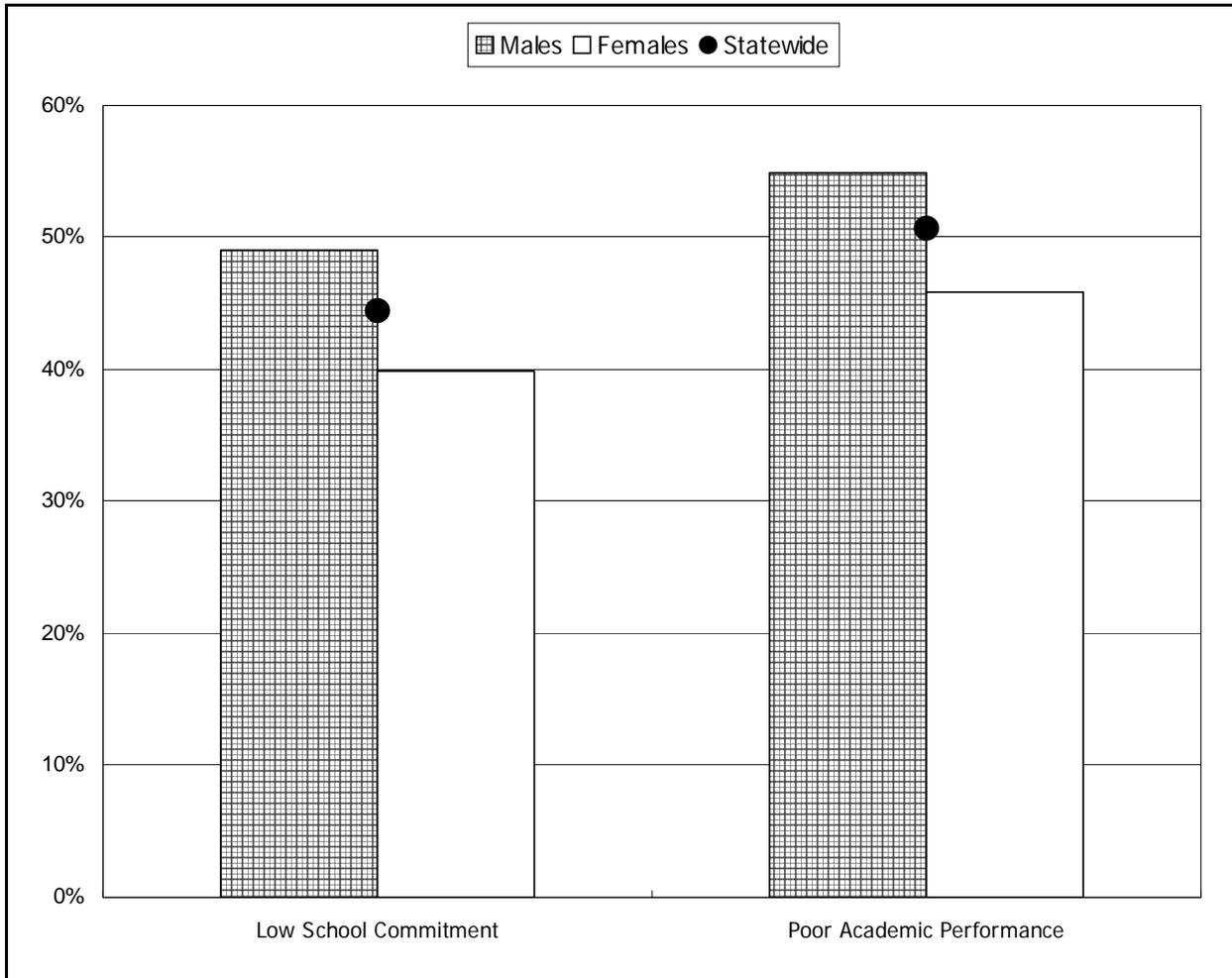
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the family domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts. Exposure to family ATOD use and family history of ASB are more prevalent among female students than among male students. Poor family supervision and parental attitudes favorable toward ASB are more prevalent among male students than among female students. A fairly similar proportion of male and female students meet the risk criteria for lack of parental sanctions for ASBs and parental attitudes favorable toward ATOD use.

**FIGURE 100**  
**School Risk Factors by Sex, 2003**

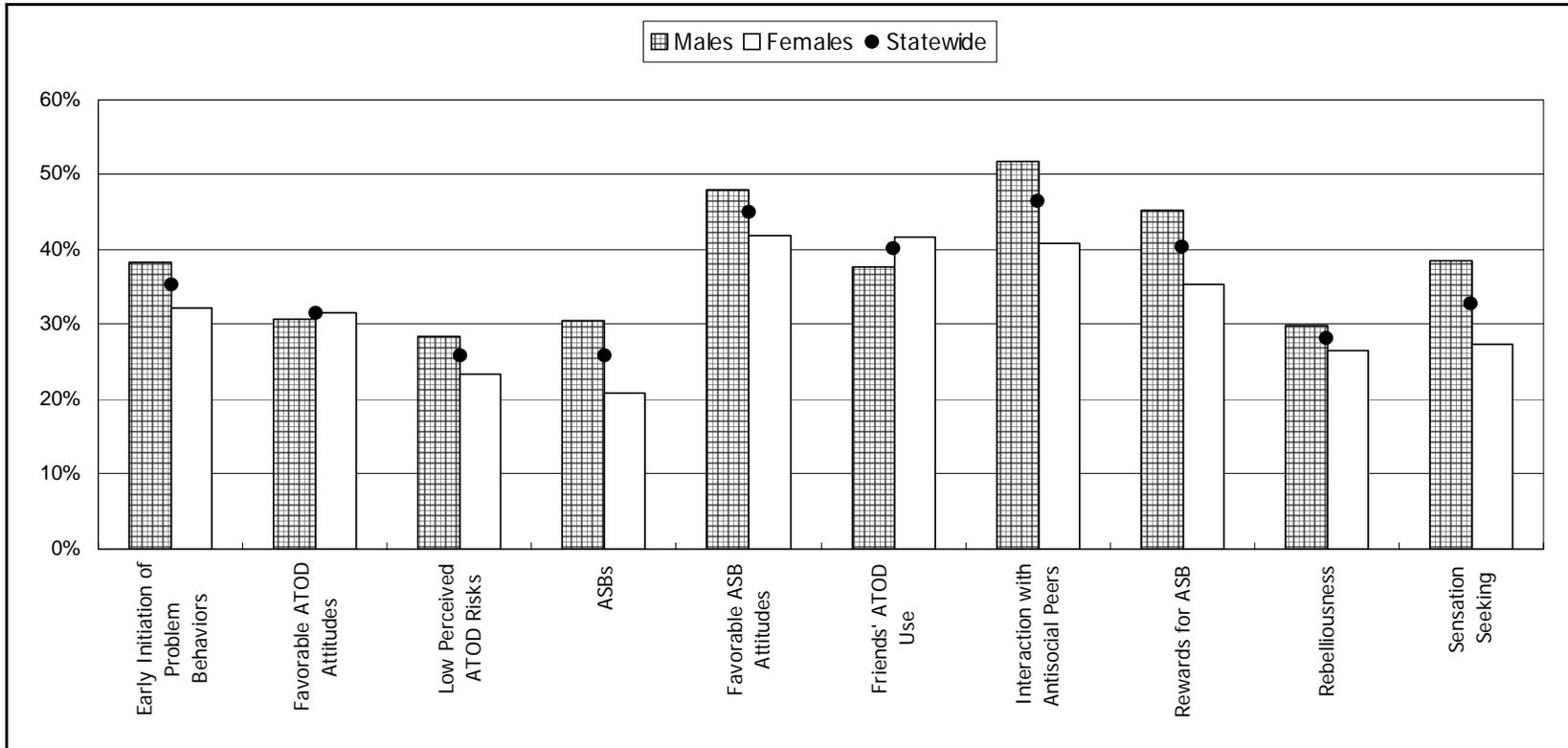
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the school domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts. Low school commitment and poor academic performance are more prevalent among male students than among female students.

**FIGURE 101**  
**Peer-Individual Risk Factors by Sex, 2003**

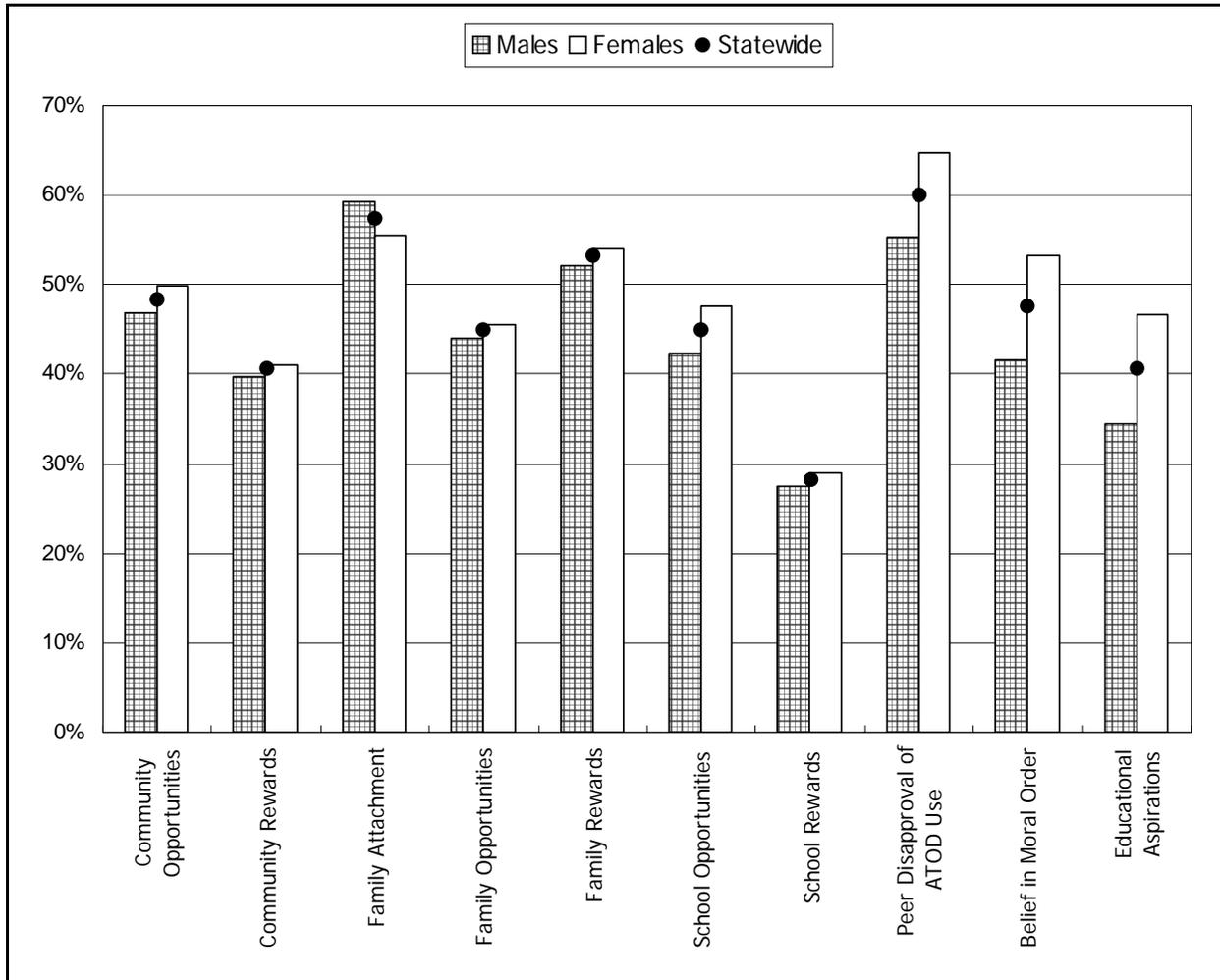
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the peer-individual domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts. Male and female students are similar to one another on favorable ATOD attitudes. More males than females meet the risk criteria for early initiation of problem behaviors, low perceived ATOD risks, ASBs, favorable ASB attitudes, interaction with antisocial peers, rewards for ASB, rebelliousness and sensation seeking. More females than males meet the risk criteria for friends' ATOD use.

**FIGURE 102**  
**Community, Family, School, and Peer-Individual Protective Factors by Sex, 2003**

(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to enhance protective factors in the community, family, school, and peer-individual domains. Protective factors that are below or nearly equal to statewide percentages (e.g., bars below the **dot**) should be top priorities of prevention efforts. Female students are more protected than male students on virtually all factors. One exception to this rule is for family attachment, with more male students protected by family attachment than female students. Differences between males and females are most pronounced for peer disapproval of ATOD use, belief in moral order, and educational aspirations, with substantially more female students than male students protected because of these factors. Male and female students are fairly equal to one another in regards to family opportunities for positive involvement and community and school rewards for positive involvement.

## Ethnic Comparisons

Similar to the previous sections, prevention efforts directed at different ethnic groups should focus on risk factors that are above the statewide percentages and protective factors that are below the statewide percentages. This section addresses risk and protective factors that are most prevalent among certain ethnic groups to help explain why groups have different prevalence rates. As noted in Chapter 4 and Chapter 6, substance use and abuse are higher among Native Hawaiian and White students than students from other ethnic groups. The risk and protective profiles detailed below can help structure prevention programs directed at lowering the prevalence rates among Native Hawaiian and White students, and can help explain factors that might be causing the higher prevalence rates among these groups of students.

Table 73 lists the percentages of students from each ethnic group who meet the criteria for each risk and protective factor, and the percentages of these students who are exposed to a high, moderate, or low number of factors. Figures 103 through 106 display each risk factor in each domain so that ethnic groups can be compared to one another, as well as to statewide percentages. Figure 107 displays each protective factor in each domain so that ethnic groups can be compared to one another, as well as to statewide percentages. Bars represent subgroup percentages, and **dots** represent statewide percentages. Bars above the **dots** on the risk factor figures represent elevated risk, and bars below the **dots** on the protective factor figures represent low levels of protection. Prevention efforts should address risk factors that are higher than statewide averages and protective factors that are lower than statewide averages.

**Overview of Key Findings.** A larger proportion of Native Hawaiian and White students than students from other ethnic backgrounds have elevated risk because of the number of risk factors to which they are exposed. Less than one tenth of Chinese and Japanese students are exposed to 15 or more risk factors, whereas over one-fifth of the Native Hawaiian and White students are exposed to 15 or more risk factors. Ethnic differences are less pronounced on the protective factor index. Specific risk and protective factors that are higher or lower among students from various ethnic groups are noted in the figures and discussed below.

- Comparisons on the *risk factor index* in Table 73 show that larger proportions of Native Hawaiian and White students than students from other ethnic groups are exposed to 15 or more risk factors. Nearly twice as many Native Hawaiians and Whites (22% each) than Filipinos (13%) are exposed to a high number of risk factors; differences are even more pronounced when comparing these groups to Chinese (7%) and Japanese (9%).
- Ethnic differences are less pronounced on the *protective factor index*. A greater proportion of Japanese (28%), compared to Native Hawaiians and Whites (27% each), and Chinese and Filipinos (24% each), are exposed to a high amount of protective factors.
- *Japanese* students have fewer problematic factors than students from all other ethnic groups (see Table 74 on pages 522-523). Prevention efforts directed at Japanese students should focus on the following problematic factors: (1) family opportunities for prosocial involvement, (2) low school commitment, (3) school opportunities for positive involvement, and (4) school rewards for positive involvement.

**TABLE 73**  
**Risk and Protective Factors by Ethnicity, 2003**

(Entries are percentages %, weighted by grade)

	Statewide	Chinese	Filipino	Japanese	Hawaiian	White	
<b>Community Domain</b>	<b><u>Risk Factors</u></b>						
	Community Disorganization	49.9	39.7	51.7	41.8	55.6	49.1
	Transition & Mobility	46.8	34.9	40.7	27.3	49.0	58.8
	Exposure to Community ATOD Use	44.7	37.0	44.4	36.2	48.2	49.1
	Laws & Norms Favorable to ATOD Use	37.1	21.4	33.7	23.5	48.0	39.2
	Perceived Availability of Drugs & Handguns	42.1	29.9	35.3	36.4	47.7	50.1
	Ability to Purchase Alcohol or Tobacco	8.5	5.5	6.4	5.5	9.0	11.1
	<b><u>Protective Factors</u></b>						
	Community Opportunities for Positive Involvement	48.4	42.7	44.3	51.7	51.0	52.2
Community Rewards for Positive Involvement	40.6	39.1	38.7	41.1	43.0	40.5	
<b>Family Domain</b>	<b><u>Risk Factors</u></b>						
	Poor Family Supervision	37.3	38.7	39.3	34.6	36.6	37.0
	Lack of Parental Sanctions for ASBs	23.8	17.7	22.1	17.7	27.8	27.5
	Parental Attitudes Favorable Toward ATOD Use	17.1	15.4	12.9	14.6	20.1	22.5
	Exposure to Family ATOD Use	46.2	31.2	42.9	41.5	53.7	53.7
	Parental Attitudes Favorable Toward ASB	25.5	21.9	22.4	21.7	27.7	31.0
	Family (Sibling) History of ASB	32.8	16.5	29.2	22.7	43.6	38.5
	<b><u>Protective Factors</u></b>						
	Family Attachment	57.3	54.8	54.4	58.5	59.7	57.9
	Family Opportunities for Positive Involvement	44.9	39.1	39.8	43.8	49.0	47.1
Family Rewards for Positive Involvement	53.2	47.0	47.6	53.7	55.4	59.1	
<b>School Domain</b>	<b><u>Risk Factors</u></b>						
	Low School Commitment	44.5	41.6	36.8	45.6	43.9	52.1
	Poor Academic Performance	50.7	40.7	50.6	39.6	58.2	44.7
	<b><u>Protective Factors</u></b>						
	School Opportunities for Positive Involvement	44.9	44.6	47.1	43.6	49.9	40.3
School Rewards for Positive Involvement	28.2	26.2	31.0	23.3	31.7	25.3	

(Table continued on next page)

**TABLE 73 (continued)**  
**Risk and Protective Factors by Ethnicity, 2003**

(Entries are percentages %, weighted by grade)

		Statewide	Chinese	Filipino	Japanese	Hawaiian	White
<b>Peer-Individual Domain</b>	<b><u>Risk Factors</u></b>						
	Early Initiation of Problem Behaviors	35.3	18.2	32.8	20.5	45.9	37.7
	Favorable Attitudes Toward ATOD Use	31.6	22.7	28.2	26.4	35.1	37.6
	Low Perceived ATOD Use Risk	26.0	20.9	23.4	21.6	29.2	28.6
	Antisocial Behaviors (ASBs)	26.0	13.4	23.0	15.3	33.6	24.7
	Favorable Attitudes Toward ASB	45.1	39.4	41.9	42.3	44.4	52.1
	Friends' ATOD Use	40.2	19.1	38.2	26.7	51.6	41.1
	Interaction with Antisocial Peers	46.6	27.7	45.1	32.0	56.3	46.3
	Rewards for Antisocial Involvement	40.4	28.8	37.2	31.1	43.5	47.5
	Rebelliousness	28.2	24.9	27.4	23.5	30.3	28.7
	Sensation Seeking	32.9	21.6	27.6	26.9	36.3	40.1
	<b><u>Protective Factors</u></b>						
	Peer Disapproval of ATOD Use	60.1	66.8	62.9	68.1	54.5	57.7
	Belief in the Moral Order	47.7	54.2	49.9	52.4	45.4	45.6
Educational Aspirations	40.7	50.8	37.9	48.7	33.8	44.0	
<b>Indexes</b>	<b><u>Risk Factor Index</u></b>						
	Low Risk (0 to 9 Risk Factors)	60.8	76.6	65.6	73.7	52.3	54.4
	Moderate Risk (10 to 14 Risk Factors)	22.6	16.2	21.8	17.1	25.4	23.6
	High Risk (15 to 24 Risk Factors)	16.7	7.2	12.6	9.2	22.3	22.1
	<b><u>Protective Factor Index</u></b>						
	Low Protection (0 to 3 Protective Factors)	34.6	35.0	36.9	31.8	32.3	35.0
	Moderate Protection (4 to 6 Protective Factors)	39.8	40.7	39.4	40.4	40.8	37.8
High Protection (7 to 10 Protective Factors)	25.6	24.3	23.7	27.9	26.8	27.2	

NOTES: The percentages above represent the percentage of students who are either at risk for or who have protection from developing a substance abuse problem. Estimates were determined by weighting the percentage at each grade level by the statewide *N*-sizes at that grade level (see notes at the end of the chapter). Statewide percentages are used as comparison points for determining which factors should be targeted in various communities or subgroups. Risk factors above and protective factors below the statewide percentages should be considered critical factors to address in prevention efforts. Some students who meet the cutpoint criteria may not develop a substance abuse problem; however, the majority of the students who meet the cutpoint criteria have or will develop a substance abuse problem. The likelihood of a substance abuse problem increases with the number of risk factors to which a student is exposed and decreases with the number of protective factors to which a student is exposed. The risk and protective factor indexes provide the best indication of degree of risk and protection.

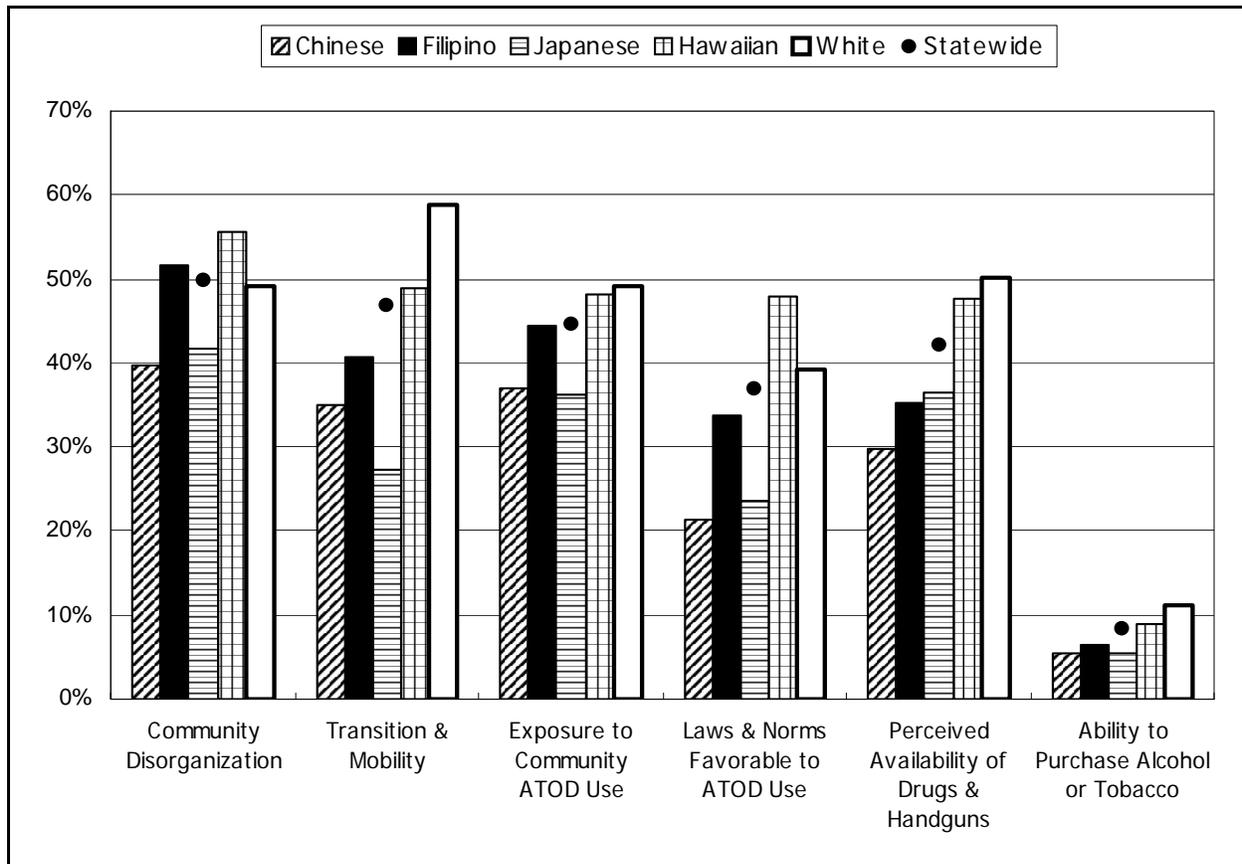
## Chapter 11

- **Chinese** students are similar to Japanese students in that they have very few problematic risk and protective factors, and most of the problematic factors are related to low protective factors (see Table 74 on pages 522-523). Prevention efforts directed at Chinese students should focus on the following problematic factors: (1) community opportunities for positive involvement, (2) community rewards for positive involvement, (3) poor family supervision, (4), family attachment, (5) family opportunities for prosocial involvement, (6) family rewards for prosocial involvement, (7) school opportunities for positive involvement, and (8) school rewards for positive involvement.
- Prevention efforts directed at **Filipino** students should focus on the following problematic factors: (1) community disorganization, (2) community opportunities for positive involvement, (3) community rewards for positive involvement, (4) poor family supervision, (5) family attachment, (6) family opportunities for prosocial involvement, (7) family rewards for prosocial involvement, and (8) educational aspirations.
- **Native Hawaiian** students have fewer problematic protective factors, but more problematic risk factors than students from all other ethnic groups. Every community domain risk factor is problematic for Native Hawaiian students in 2003, but none of the protective factors in the community domain are problematic. Every family domain risk factor except poor family supervision is problematic for Native Hawaiian students in 2003, but none of the protective factors in the family domain are problematic. Similarly, one of the school domain risk factors is problematic for Native Hawaiians in 2003 (poor academic performance), but none of the school domain protective factors are problematic for Native Hawaiians. In the peer-individual domain, every risk and protective factor is problematic for Native Hawaiian students except favorable attitudes toward ASB. See Summary Table 74 and Figures 104 through 108 for ethnic differences on each risk and protective factor.
- **White** students are very similar to Native Hawaiian students, with virtually every risk factor in every domain being problematic (see Summary Table 74 and Figures 104 through 108). The following factors are not problematic for White students: community disorganization, community rewards for positive involvement, poor family supervision, poor academic performance, ASBs, and interaction with antisocial peers. In regards to enhancing critical protective factors, prevention efforts directed at White students should focus on (1) community rewards for positive involvement, (2) school opportunities for positive involvement, (3) school rewards for positive involvement, (3) peer disapproval of ATOD use and ASB, and (4) belief in the moral order.

In sum, risk factors that should be prioritized when developing prevention efforts aimed at various ethnic groups can be noted by scanning Figures 103 through 106 and looking for bars that are above or equal to the **dots** in the figures. Protective factors that should be prioritized when developing prevention efforts aimed at various ethnic groups can be noted by scanning Figure 107 and looking for bars that are below or equal to the **dots** in the figure. Table 74 summarizes the ethnic comparisons discussed above by placing a date ('00, '02, '03, or all) to indicate the year in which the risk or protective factor was problematic. Prevention efforts should focus on factors that have become or that remain problematic in 2003.

**FIGURE 103**  
**Community Risk Factors by Ethnicity, 2003**

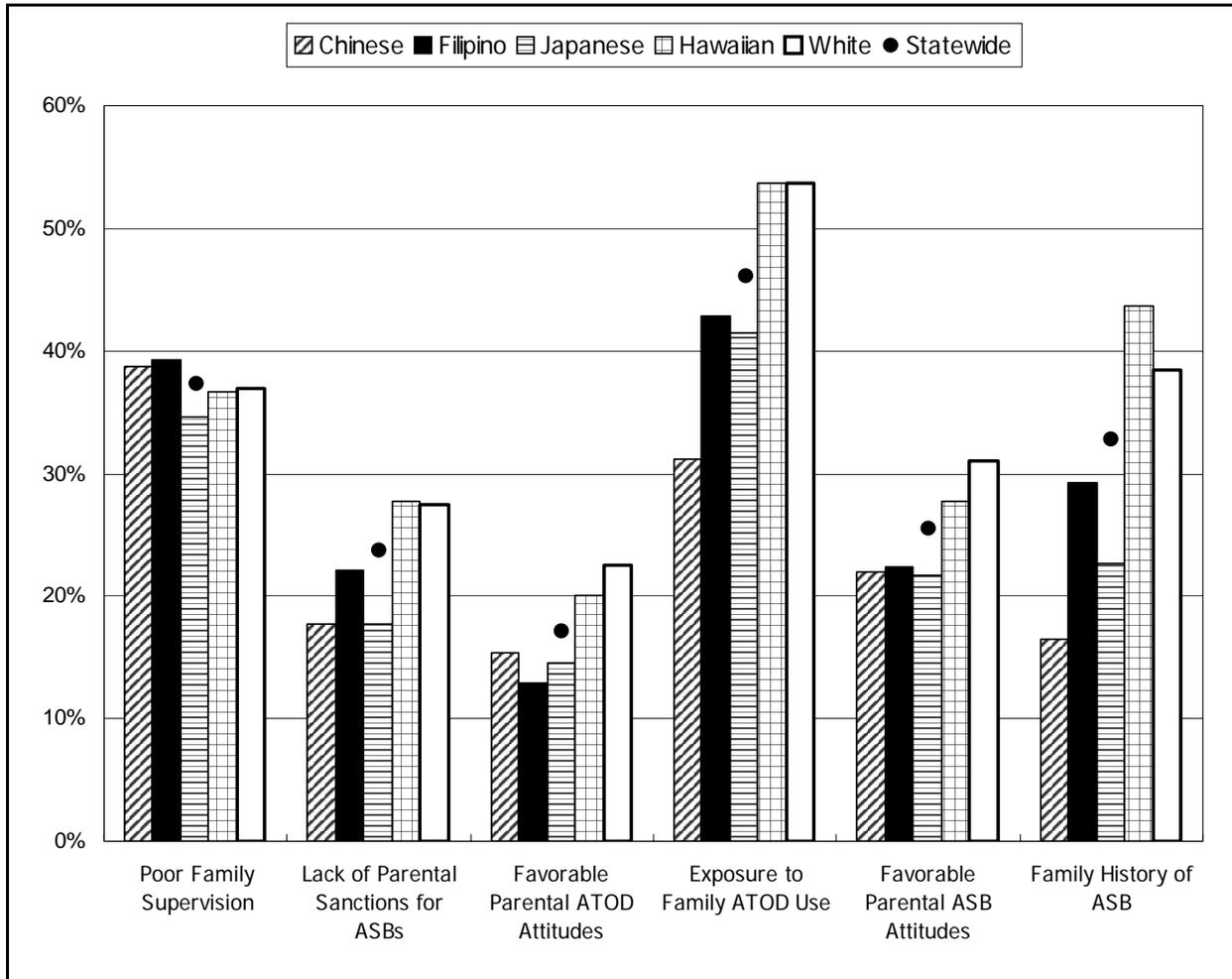
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the community domain that are higher than or nearly equal to statewide percentages (e.g., bars above the dot) should be a top priority of prevention efforts. Chinese and Japanese students represent the smallest proportion at risk on all of the community domain factors, except for perceived availability of drugs and handguns where the proportion of Japanese students slightly exceeds the proportion of Filipino students. Community disorganization is most prevalent among Filipinos and Native Hawaiians, and least prevalent among Chinese. Transition and mobility is much more prevalent among Whites than all other ethnic groups and much less prevalence among Japanese. Exposure to community ATOD use is most prevalent among Whites, Native Hawaiians, and Filipinos. Laws and norms favorable to ATOD use is most prevalent among Native Hawaiians, followed by Whites and Filipinos. Perceived availability of drugs and handguns is much more prevalent among Native Hawaiians and Whites than all other ethnic groups. Similarly, more Whites and Native Hawaiians are at risk due to ability to purchase alcohol or tobacco.

**FIGURE 104**  
**Family Risk Factors by Ethnicity, 2003**

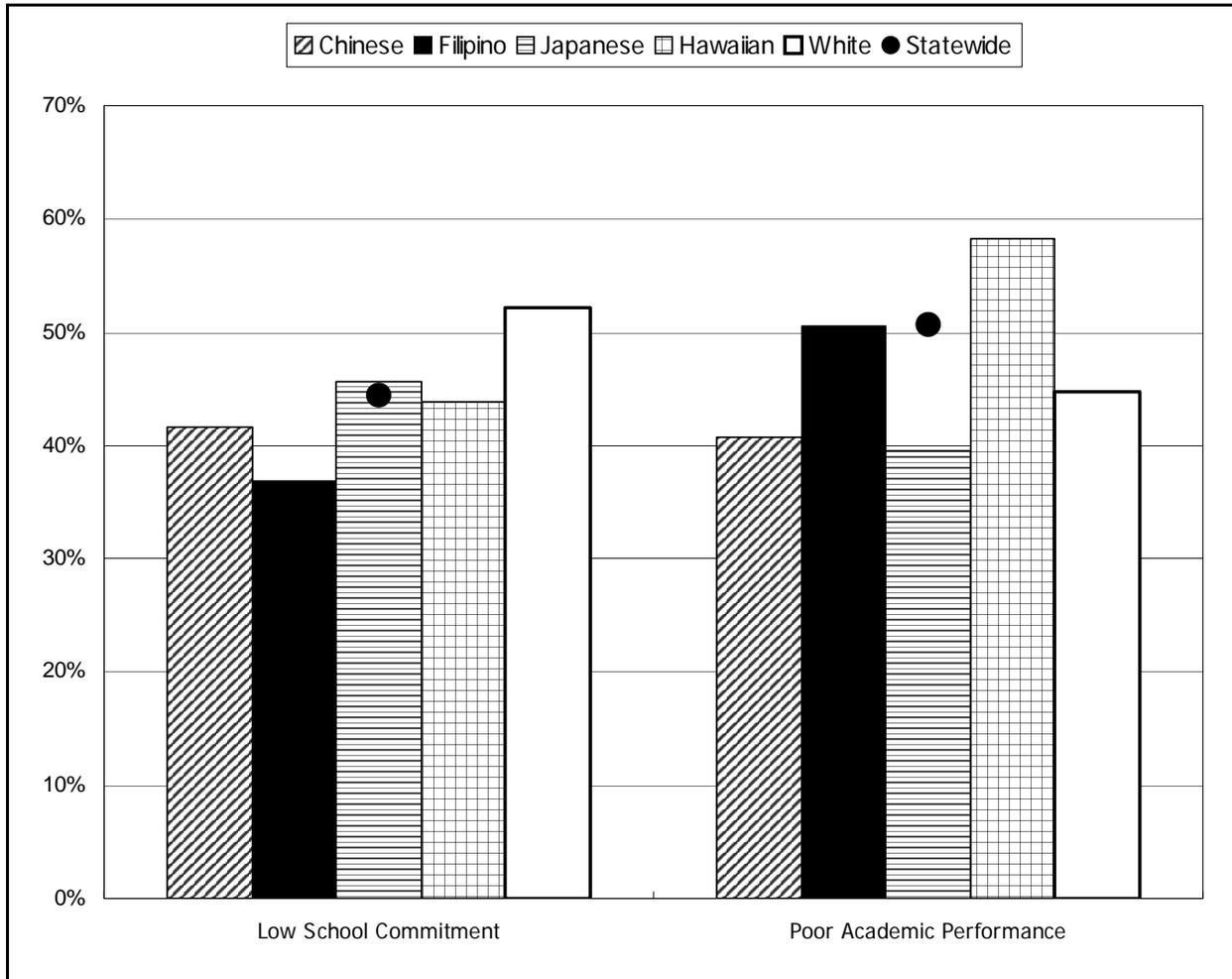
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the family domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts. Native Hawaiians and Whites typically represent the largest proportion at risk on each of the family domain factors. The exception is for poor family supervision, where greater proportions of Chinese and Filipino students than students in other ethnic groups meet the risk criteria for poor family supervision. Lack of parental sanctions for ASBs, parental attitudes favorable toward ATOD use, exposure to family ATOD use, parental attitudes favorable toward ASB, and family history of ASB are much more prevalent among Native Hawaiians and Whites than among other ethnic groups.

**FIGURE 105**  
**School Risk Factors by Ethnicity, 2003**

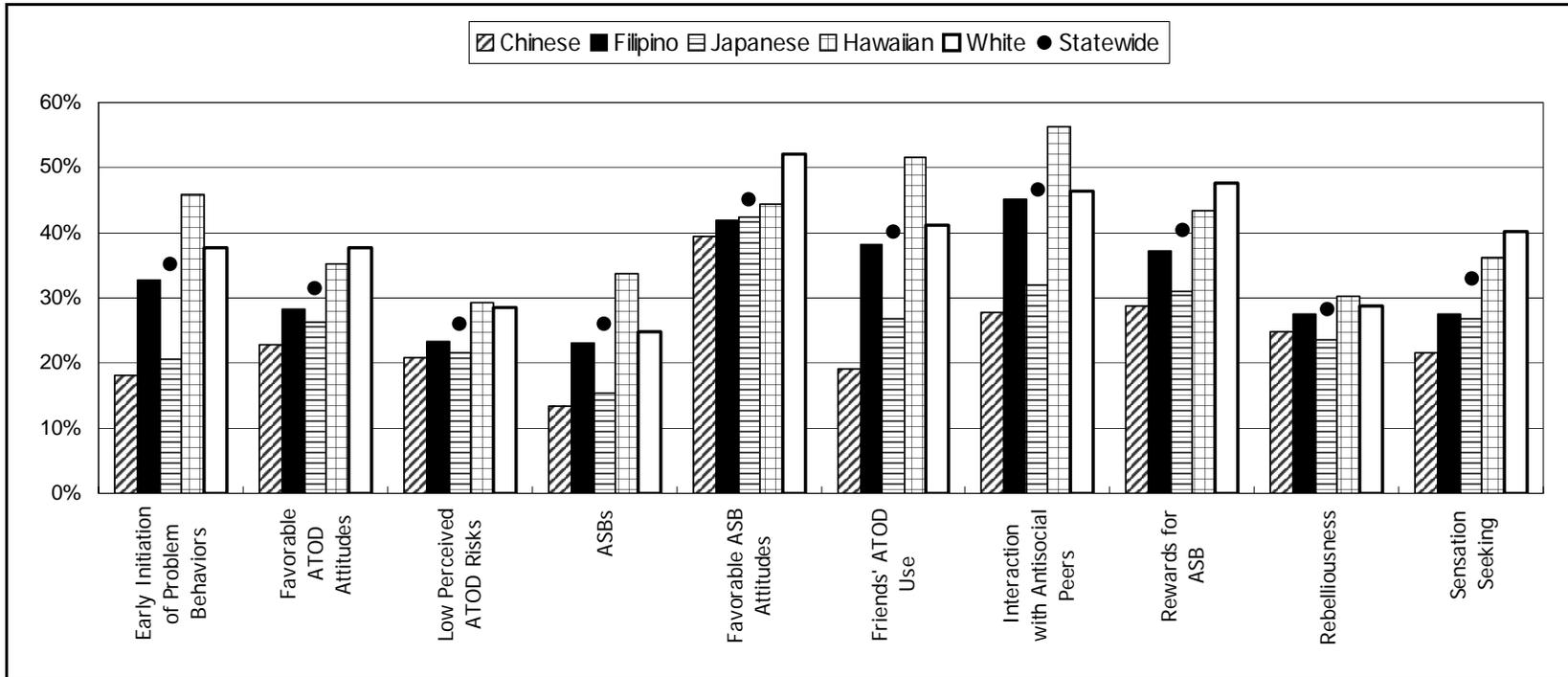
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the school domain that are higher than or nearly equal to statewide percentages (e.g., bars above the **dot**) should be a top priority of prevention efforts. Low school commitment is most prevalent among Whites and is least prevalent among Filipinos. Poor academic performance is most prevalent among Native Hawaiians, followed by Filipinos.

**FIGURE 106**  
**Peer-Individual Risk Factors by Ethnicity, 2003**

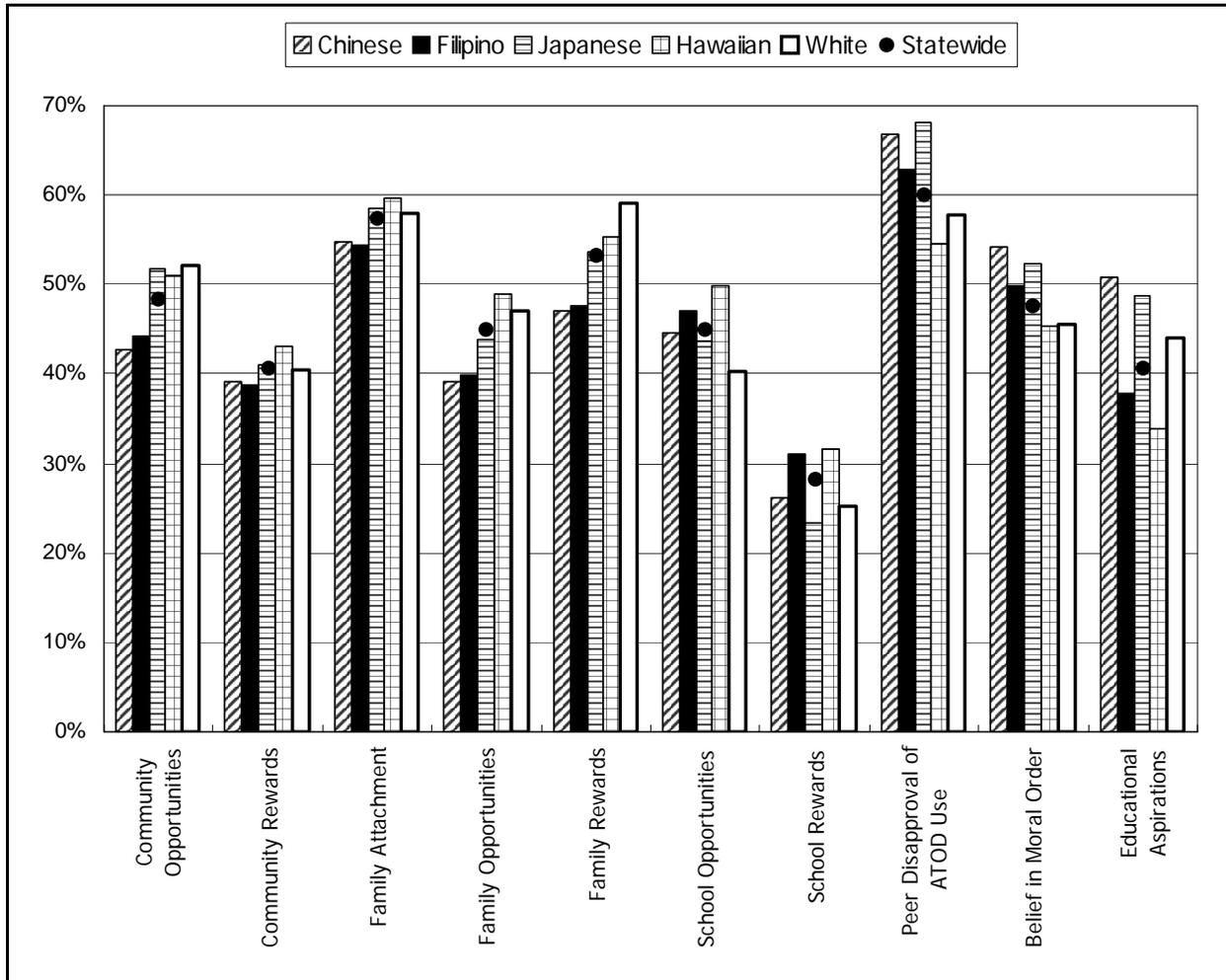
(Entries are percentages %)



**Interpretation of the Chart:** Prevention efforts must focus on developing and implementing programs designed to decrease risk factors. Risk factors in the peer-individual domain that are higher than or nearly equal to statewide percentages (e.g., bars above the dot) should be a top priority of prevention efforts. Chinese and Japanese students represent the smallest proportion at risk on each of the peer-individual domain risk factors. Chinese students are most similar to other ethnic groups in regards to low perceived ATOD risks and rebelliousness. Native Hawaiians and Whites have a greater proportion at risk on each of the peer-individual domain risk factors than Chinese, Japanese, and Filipinos. Early initiation of problem behaviors, friends' ATOD use, and interaction with antisocial peers are highest among Native Hawaiian students. Favorable ATOD attitudes, favorable ASB attitudes, rewards for ASB, and sensation seeking are highest among White students.

**FIGURE 107**  
**Community, Family, School, and Peer-Individual Protective Factors by Ethnicity, 2003**

(Entries are percentages %)



**Findings for Protective Factors:** Prevention efforts must focus on developing and implementing programs designed to enhance community, family, school, and peer-individual protective factors. Protective factors that are below or nearly equal to statewide percentages (e.g., bars below the **dot**) should be top priorities of prevention efforts. In the community and family domains, Japanese, Native Hawaiian, and White students are more protected than Chinese and Filipino students. Native Hawaiian students are more protected by school opportunities for positive involvement than Filipino, Japanese, Chinese or White students. Filipino and Native Hawaiian students are more protected by school rewards for positive involvement than Chinese, Japanese, and White students. In the peer-individual domain, Chinese and Japanese students are more protected by peer disapproval of ATOD use, belief in moral order, and educational aspirations than are students from other ethnic groups.

**TABLE 74**  
**Trends in Problematic Risk and Protective Factors by Sex and Ethnicity:**  
**Identification of High Risk Factors and Low Protective Factors in 2000, 2002, and 2003**

('00, '02, '03, and *all* indicate year in which risk/protective factor was problematic)

Risk/Protective Factors	Sex		Ethnic Background				
	Male	Female	Chinese	Filipino	Japanese	Hawaiian	White
<b>Community Domain: Risk Factors</b>							
Community Disorganization	all			all		all	
Transition & Mobility		all				all	all
Exposure to Community ATOD Use		all				all	all
Laws and Norms Favorable to ATOD Use	all					all	all
Perceived Availability of Drugs and Handguns	all					'02, '03	all
Ability to Purchase Alcohol or Tobacco	all					all	all
<b>Community Domain: Protective Factors</b>							
Community Opportunities for Positive Involvement	all		all	all			
Community Rewards for Positive Involvement	'02, '03		all	all	'00		'02, '03
<b>Family Domain: Risk Factors</b>							
Poor Family Supervision	all		all	all			
Lack of Parental Sanctions for ASBs	'00, '02	'03		'00		all	all
Parental Attitudes Favorable Toward ATOD Use	'00, '02	'03				all	all
Exposure to Family ATOD Use		all				all	all
Parental Attitudes Favorable Toward ASB	all					all	all
Family (Sibling) History of ASB		all				all	all
<b>Family Domain: Protective Factors</b>							
Family Attachment		all	all	all			
Family Opportunities for Prosocial Involvement	all		all	all	all		
Family Rewards for Prosocial Involvement	all		all	all	'00		

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**TABLE 74 (continued)**  
**Trends in Problematic Risk and Protective Factors by Sex and Ethnicity:**  
**Identification of High Risk Factors and Low Protective Factors in 2000, 2002, and 2003**

('00, '02, '03, and *all* indicate year in which risk/protective factor was problematic)

Risk/Protective Factors	Sex		Ethnic Background				
	Male	Female	Chinese	Filipino	Japanese	Hawaiian	White
<b>School Domain: Risk Factors</b>							
Low School Commitment	all				all	'00, '02	all
Poor Academic Performance	all			'00, '02		all	
<b>School Domain: Protective Factors</b>							
School Opportunities for Positive Involvement	all		'03		all		all
School Rewards for Positive Involvement	all		'02, '03		all		all
<b>Peer-Individual Domain: Risk Factors</b>							
Early Initiation of Problem Behaviors	all					all	all
Favorable Attitudes Toward ATOD Use	'00	'02, '03				all	all
Low Perceived ATOD Use Risk	all					all	all
Antisocial Behaviors (ASBs)	all					all	'00, '02
Favorable Attitudes Toward ASB	all					'02	all
Friends' ATOD Use		all		'02		all	all
Interaction with Antisocial Peers	all					all	'00, '02
Rewards for Antisocial Involvement	all					all	all
Rebelliousness	all					all	all
Sensation Seeking	all					all	all
<b>Peer-Individual Domain: Protective Factors</b>							
Peer Disapproval of ATOD Use & ASB	all					all	all
Belief in the Moral Order	all					all	all
Educational Aspirations	all			all		all	

NOTES: Dates ('00=2000; '02=2002; '03=2003; *all*=all three years) indicate risk factors that are higher than or equal to statewide percentages, and protective factors that are lower than or equal to statewide percentages in that particular year. Prevention efforts need to focus on the bolded items which have remained or have become problematic in 2003.

**TABLE 75**  
**Trends in Risk and Protective Factors by Subgroups, 2000-2003**

(Entries are percentages %)

<i>Prevention efforts should decrease risk factors (R) and increase protective factors (P).</i>	Community Disorganization (R)				Transition and Mobility (R)				Exposure to Community ATOD Use (R)			
	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change
<b>Statewide:</b>	43.4	48.8	49.9	+1.1	42.5	44.3	46.8	+2.5	38.6	44.4	44.7	+0.3
<b>Place of Residence:</b>												
City & County of Honolulu	45.5	49.5	50.4	+0.9	42.8	45.7	47.5	+1.8	37.3	43.4	44.0	+0.6
Hawaii County	40.7	50.6	49.5	-1.1	43.5	42.2	48.7	+6.5	43.7	46.0	48.5	+2.5
Kauai County	39.6	46.6	51.0	+4.4	35.6	37.5	39.1	+1.6	39.5	46.9	39.7	-7.2
Maui County	36.2	45.1	46.3	+1.2	43.1	41.2	44.4	+3.2	39.4	47.5	46.8	-0.7
<b>Public School District:</b>												
Honolulu District	44.8	52.1	51.5	-0.6	41.4	44.1	45.3	+1.2	38.0	44.2	44.1	-0.1
Central District	44.2	47.5	48.8	+1.3	52.2	53.7	55.8	+2.1	39.7	43.9	45.3	+1.4
Leeward District	54.3	55.0	52.2	-2.8	44.8	48.5	51.8	+3.3	38.9	45.3	45.8	+0.5
Windward District	38.6	45.5	50.9	+5.4	42.7	44.8	46.3	+1.5	42.0	49.2	48.7	-0.5
Hawaii District	41.3	51.9	49.6	-2.3	41.5	40.1	47.2	+7.1	43.6	46.3	49.6	+3.3
Kauai District	40.3	46.6	51.0	+4.4	35.0	37.2	38.8	+1.6	39.6	46.2	41.0	-5.2
Maui District	36.3	45.7	46.6	+0.9	41.8	40.7	41.9	+1.2	39.1	48.4	46.8	-1.6
<b>Sex:</b>												
Male	45.4	50.0	51.3	+1.3	41.7	42.6	45.2	+2.6	37.6	42.0	42.0	0.0
Female	41.8	47.8	48.7	+0.9	43.2	45.7	48.2	+2.5	39.6	46.4	47.1	+0.7
<b>Ethnicity:</b>												
Chinese	34.9	43.9	39.7	-4.2	32.7	36.2	34.9	-1.3	28.7	35.2	37.0	+1.8
Filipino	47.8	52.4	51.7	-0.7	36.8	39.7	40.7	+1.0	36.9	42.9	44.4	+1.5
Japanese	33.0	40.1	41.8	+1.7	22.1	25.1	27.3	+2.2	30.1	36.8	36.2	-0.6
Native Hawaiian	48.3	52.5	55.6	+3.1	43.4	46.0	49.0	+3.0	40.1	47.2	48.2	+1.0
White	38.3	46.0	49.1	+3.1	62.4	57.6	58.8	+1.2	47.7	50.7	49.1	-1.6

(Table continued on next page)

**TABLE 75 (continued)**  
**Trends in Risk and Protective Factors by Subgroups, 2000-2003**

(Entries are percentages %)

<i>Prevention efforts should decrease risk factors (R) and increase protective factors (P).</i>	Laws & Norms Favorable to ATOD Use (R)				Perceived Availability of Drugs & Handguns (R)				Ability to Purchase Alcohol and Tobacco (R)			
	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change
<b>Statewide:</b>	43.3	40.8	37.1	-3.7	41.9	50.0	42.1	-7.9	13.4	11.4	8.5	-2.9
<b>Place of Residence:</b>												
City & County of Honolulu	39.7	37.5	33.5	-4.0	40.4	48.8	40.3	-8.5	12.9	11.6	8.2	-3.4
Hawaii County	56.2	52.5	49.8	-2.7	48.7	54.4	49.8	-4.6	17.0	12.9	10.2	-2.7
Kauai County	48.4	44.8	37.8	-7.0	43.3	50.8	40.0	-10.8	13.2	9.4	7.4	-2.0
Maui County	47.0	47.4	42.8	-4.6	41.5	52.2	44.7	-7.5	12.3	10.4	9.3	-1.1
<b>Public School District:</b>												
Honolulu District	37.6	33.7	34.0	+0.3	37.6	44.9	36.3	-8.6	11.5	11.9	8.1	-3.8
Central District	37.6	34.0	30.1	-3.9	43.4	46.6	41.0	-5.6	13.8	11.0	8.3	-2.7
Leeward District	45.3	43.3	37.9	-5.4	36.4	48.0	39.2	-8.8	12.4	10.3	8.3	-2.0
Windward District	46.7	41.2	37.3	-3.9	46.5	58.0	46.7	-11.3	15.7	13.3	10.2	-3.1
Hawaii District	56.6	52.2	50.2	-2.0	46.3	52.9	49.2	-3.7	15.4	10.9	9.0	-1.9
Kauai District	48.6	44.6	39.1	-5.5	42.3	50.1	41.1	-9.0	13.3	9.7	7.9	-1.8
Maui District	46.9	47.6	42.3	-5.3	40.2	51.5	43.1	-8.4	12.4	10.8	8.4	-2.4
<b>Sex:</b>												
Male	44.7	42.3	37.5	-4.8	42.1	51.0	42.1	-8.9	13.8	11.9	8.6	-3.3
Female	42.1	39.4	36.2	-3.2	41.8	49.0	41.7	-7.3	13.2	10.9	8.3	-2.6
<b>Ethnicity:</b>												
Chinese	23.7	24.8	21.4	-3.4	31.8	39.3	29.9	-9.4	6.2	7.6	5.5	-2.1
Filipino	39.7	38.8	33.7	-5.1	34.1	44.0	35.3	-8.7	11.5	8.9	6.4	-2.5
Japanese	28.7	29.8	23.5	-6.3	35.6	44.0	36.4	-7.6	8.7	8.0	5.5	-2.5
Native Hawaiian	57.3	52.3	48.0	-4.3	40.6	55.4	47.7	-7.7	16.2	13.6	9.0	-4.6
White	46.3	43.7	39.2	-4.5	57.6	59.3	50.1	-9.2	17.1	12.4	11.1	-1.3

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**TABLE 75 (continued)**  
**Trends in Risk and Protective Factors by Subgroups, 2000-2003**

(Entries are percentages %)

<i>Prevention efforts should decrease risk factors (R) and increase protective factors (P).</i>	Community Opportunities for Positive Involvement (P)				Community Rewards for Positive Involvement (P)				Poor Family Supervision (R)			
	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change
<b>Statewide:</b>	43.6	47.1	48.4	+1.3	45.3	36.9	40.6	+3.7	46.1	42.8	37.3	-5.5
<b>Place of Residence:</b>												
City & County of Honolulu	38.4	44.1	44.7	+0.6	44.2	36.4	41.0	+4.6	45.5	42.4	36.5	-5.9
Hawaii County	54.0	50.9	53.5	+2.6	48.4	38.0	37.9	-0.1	47.0	44.8	40.5	-4.3
Kauai County	58.7	57.4	58.4	+1.0	48.2	37.8	45.0	+7.2	47.3	43.6	39.0	-4.6
Maui County	53.3	55.4	60.2	+4.8	46.3	38.5	39.3	+0.8	47.1	43.4	37.8	-5.6
<b>Public School District:</b>												
Honolulu District	33.3	39.2	38.2	-1.0	40.9	33.4	38.4	+5.0	46.3	42.0	39.0	-3.0
Central District	40.8	45.3	47.8	+2.5	43.5	37.8	38.7	+0.9	45.6	42.7	35.9	-6.8
Leeward District	35.9	41.3	41.4	+0.1	44.2	35.0	40.1	+5.1	46.1	41.5	38.0	-3.5
Windward District	36.4	49.1	51.0	+1.9	49.6	39.2	47.1	+7.9	45.4	45.9	36.7	-9.2
Hawaii District	54.2	51.0	53.7	+2.7	48.5	38.3	37.1	-1.2	46.1	44.3	40.3	-4.0
Kauai District	58.7	57.7	58.6	+0.9	48.6	37.1	43.9	+6.8	47.7	43.8	38.6	-5.2
Maui District	53.2	55.2	59.5	+4.3	46.8	38.9	39.1	+0.2	46.1	44.0	37.3	-6.7
<b>Sex:</b>												
Male	39.0	45.2	46.8	+1.6	45.4	36.7	39.7	+3.0	52.2	47.7	42.5	-5.2
Female	47.3	48.6	49.8	+1.2	45.4	37.0	41.0	+4.0	41.1	38.5	32.5	-6.0
<b>Ethnicity:</b>												
Chinese	33.3	41.0	42.7	+1.7	37.1	31.8	39.1	+7.3	50.1	44.9	38.7	-6.2
Filipino	35.9	42.4	44.3	+1.9	42.0	35.0	38.7	+3.7	49.7	44.6	39.3	-5.3
Japanese	46.6	49.6	51.7	+2.1	44.5	37.4	41.1	+3.7	43.1	41.6	34.6	-7.0
Native Hawaiian	44.5	49.5	51.0	+1.5	50.5	40.5	43.0	+2.5	45.0	40.8	36.6	-4.2
White	50.2	51.0	52.2	+1.2	47.0	36.7	40.5	+3.8	45.3	42.4	37.0	-5.4

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**TABLE 75 (continued)**  
**Trends in Risk and Protective Factors by Subgroups, 2000-2003**

(Entries are percentages %)

<i>Prevention efforts should decrease risk factors (R) and increase protective factors (P).</i>	Lack of Parental Sanctions for ASBs (R)				Parental Attitudes Favorable Toward ATOD Use (R)				Exposure to Family ATOD Use (R)			
	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change
<b>Statewide:</b>	36.8	28.2	23.8	-4.4	25.8	20.8	17.1	-3.7	45.5	48.8	46.2	-2.6
<b>Place of Residence:</b>												
City & County of Honolulu	33.5	26.0	21.4	-4.6	23.9	19.1	15.2	-3.9	43.2	47.2	44.4	-2.8
Hawaii County	47.9	35.6	31.8	-3.8	34.9	27.8	25.5	-2.3	53.8	55.4	54.9	-0.5
Kauai County	42.3	31.5	25.5	-6.0	26.0	22.0	16.7	-5.3	49.3	52.0	44.9	-7.1
Maui County	39.5	32.9	28.1	-4.8	26.5	23.9	19.5	-4.4	47.5	49.8	47.4	-2.4
<b>Public School District:</b>												
Honolulu District	36.6	26.2	23.1	-3.1	24.2	18.8	14.6	-4.2	41.8	45.1	43.9	-1.2
Central District	33.8	25.8	20.8	-5.0	24.5	17.9	14.9	-3.0	45.3	47.3	44.2	-3.1
Leeward District	34.3	27.2	23.3	-3.9	22.8	17.3	15.6	-1.7	43.5	49.2	46.5	-2.7
Windward District	39.6	32.8	26.7	-6.1	29.9	24.1	19.5	-4.6	53.3	55.0	46.0	-9.0
Hawaii District	47.4	35.3	31.7	-3.6	34.3	27.4	25.3	-2.1	54.2	55.9	55.7	-0.2
Kauai District	42.1	31.3	26.7	-4.6	26.0	22.3	17.5	-4.8	48.8	52.3	46.0	-6.3
Maui District	39.3	33.5	27.9	-5.6	25.8	24.4	18.2	-6.2	48.1	49.9	46.3	-3.6
<b>Sex:</b>												
Male	38.8	29.3	23.1	-6.2	26.5	21.4	16.7	-4.7	42.9	46.4	44.7	-1.7
Female	34.9	27.1	23.9	-3.2	25.2	20.2	17.1	-3.1	47.5	50.7	47.9	-2.8
<b>Ethnicity:</b>												
Chinese	29.4	23.4	17.7	-5.7	21.8	17.7	15.4	-2.3	29.6	36.3	31.2	-5.1
Filipino	37.1	26.9	22.1	-4.8	22.5	16.7	12.9	-3.8	38.7	44.8	42.9	-1.9
Japanese	28.4	20.8	17.7	-3.1	21.0	18.5	14.6	-3.9	40.9	44.4	41.5	-2.9
Native Hawaiian	43.4	33.5	27.8	-5.7	31.3	24.9	20.1	-4.8	51.8	54.5	53.7	-0.8
White	42.0	31.5	27.5	-4.0	31.3	25.2	22.5	-2.7	55.3	56.9	53.7	-3.2

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**TABLE 75 (continued)**  
**Trends in Risk and Protective Factors by Subgroups, 2000-2003**

(Entries are percentages %)

<i>Prevention efforts should decrease risk factors (R) and increase protective factors (P).</i>	Parental Attitudes Favorable Toward ASB (R)				Family (Sibling) History of ASB (R)				Family Attachment (P)			
	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change
<b>Statewide:</b>	37.9	27.1	25.5	-1.6	40.5	34.0	32.8	-1.2	46.0	50.9	57.3	+6.4
<b>Place of Residence:</b>												
City & County of Honolulu	36.5	26.1	24.3	-1.8	37.0	31.9	30.3	-1.6	44.7	50.3	57.0	+6.7
Hawaii County	43.3	32.2	29.7	-2.5	49.8	41.5	42.7	+1.2	49.6	52.8	56.5	+3.7
Kauai County	38.9	26.6	25.8	-0.8	46.1	37.3	32.9	-4.4	47.2	51.0	60.2	+9.2
Maui County	38.8	28.8	27.3	-1.5	47.3	37.3	36.9	-0.4	48.6	52.6	58.6	+6.0
<b>Public School District:</b>												
Honolulu District	36.0	24.3	22.6	-1.7	28.6	29.2	28.4	-0.8	41.1	46.5	54.2	+7.7
Central District	38.6	25.5	23.7	-1.8	39.1	31.2	30.0	-1.2	44.2	51.0	55.8	+4.8
Leeward District	35.6	26.5	25.2	-1.3	40.1	34.6	35.1	+0.5	43.5	49.3	54.5	+5.2
Windward District	38.4	30.4	30.9	+0.5	44.8	36.9	38.9	+2.0	49.5	50.1	57.8	+7.7
Hawaii District	42.1	31.8	29.6	-2.2	50.6	41.7	43.6	+1.9	48.5	51.9	55.1	+3.2
Kauai District	38.9	26.6	25.4	-1.2	46.5	37.8	32.7	-5.1	46.9	51.6	59.3	+7.7
Maui District	37.7	29.1	26.9	-2.2	48.2	38.1	37.8	-0.3	47.8	52.1	57.3	+5.2
<b>Sex:</b>												
Male	41.0	29.3	27.0	-2.3	38.1	30.2	28.4	-1.8	46.7	53.5	59.3	+5.8
Female	35.3	25.3	24.1	-1.2	42.3	37.1	36.9	-0.2	45.5	48.8	55.5	+6.7
<b>Ethnicity:</b>												
Chinese	31.8	23.2	21.9	-1.3	20.1	20.1	16.5	-3.6	40.6	46.2	54.8	+8.6
Filipino	36.0	24.4	22.4	-2.0	37.4	32.4	29.2	-3.2	40.7	47.3	54.4	+7.1
Japanese	27.7	22.6	21.7	-0.9	27.5	24.1	22.7	-1.4	46.1	51.4	58.5	+7.1
Native Hawaiian	42.9	31.5	27.7	-3.8	51.9	44.6	43.6	-1.0	47.7	54.1	59.7	+5.6
White	43.9	30.3	31.0	+0.7	45.5	37.3	38.5	+1.2	50.4	52.9	57.9	+5.0

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**TABLE 75 (continued)**  
**Trends in Risk and Protective Factors by Subgroups, 2000-2003**

(Entries are percentages %)

<i>Prevention efforts should decrease risk factors (R) and increase protective factors (P).</i>	Family Opportunities for Positive Involvement (P)				Family Rewards for Positive Involvement (P)				Low School Commitment (R)			
	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change
<b>Statewide:</b>	33.7	39.6	44.9	+5.3	42.6	47.7	53.2	+5.5	46.0	50.1	44.5	-5.6
<b>Place of Residence:</b>												
City & County of Honolulu	32.7	39.3	44.7	+5.4	41.1	47.0	52.5	+5.5	44.8	49.4	44.4	-5.0
Hawaii County	36.4	41.4	44.7	+3.3	46.1	50.5	53.2	+2.7	49.8	51.6	44.1	-7.5
Kauai County	34.7	37.6	46.5	+8.9	46.6	48.8	57.4	+8.6	46.8	52.0	43.7	-8.3
Maui County	35.4	40.1	45.5	+5.4	44.8	48.5	56.1	+7.6	48.1	51.8	45.9	-5.9
<b>Public School District:</b>												
Honolulu District	29.4	35.4	41.2	+5.8	35.7	42.3	46.3	+4.0	45.3	45.3	42.0	-3.3
Central District	32.2	40.4	44.0	+3.6	41.4	48.6	52.0	+3.4	46.5	49.0	46.9	-2.1
Leeward District	33.0	40.6	43.2	+2.6	38.9	44.4	48.6	+4.2	41.5	48.3	44.6	-3.7
Windward District	39.1	41.1	46.1	+5.0	47.2	47.3	57.2	+9.9	46.9	56.1	47.3	-8.8
Hawaii District	35.5	40.6	44.0	+3.4	44.0	48.6	51.7	+3.1	48.9	50.7	44.5	-6.2
Kauai District	34.3	37.5	45.8	+8.3	46.1	48.2	55.6	+7.4	46.6	51.9	45.5	-6.4
Maui District	35.1	39.7	45.1	+5.4	43.7	47.5	54.5	+7.0	46.8	51.4	45.4	-6.0
<b>Sex:</b>												
Male	32.2	38.7	44.1	+5.4	41.2	46.4	52.2	+5.8	49.8	54.1	49.1	-5.0
Female	35.0	40.4	45.5	+5.1	43.7	48.8	54.0	+5.2	42.7	46.4	39.9	-6.5
<b>Ethnicity:</b>												
Chinese	27.2	33.6	39.1	+5.5	33.3	39.7	47.0	+7.3	39.7	46.0	41.6	-4.4
Filipino	28.0	34.8	39.8	+5.0	32.9	41.3	47.6	+6.3	35.8	42.1	36.8	-5.3
Japanese	32.9	37.9	43.8	+5.9	41.9	48.5	53.7	+5.2	47.7	51.5	45.6	-5.9
Native Hawaiian	37.9	45.4	49.0	+3.6	47.5	51.7	55.4	+3.7	49.1	50.5	43.9	-6.6
White	39.5	41.9	47.1	+5.2	51.5	53.9	59.1	+5.2	54.2	58.4	52.1	-6.3

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**TABLE 75 (continued)**  
**Trends in Risk and Protective Factors by Subgroups, 2000-2003**

(Entries are percentages %)

<i>Prevention efforts should decrease risk factors (R) and increase protective factors (P).</i>	Poor Academic Performance (R)				School Opportunities for Positive Involvement (P)				School Rewards for Positive Involvement (P)			
	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change
<b>Statewide:</b>	44.6	49.5	50.7	+1.2	43.7	37.1	44.9	+7.8	42.4	23.9	28.2	+4.3
<b>Place of Residence:</b>												
City & County of Honolulu	45.6	50.1	51.0	+0.9	45.1	38.2	46.0	+7.8	43.0	24.1	28.1	+4.0
Hawaii County	40.0	45.5	50.8	+5.3	40.9	34.9	42.6	+7.7	43.8	25.2	28.4	+3.2
Kauai County	41.9	49.6	47.1	-2.5	37.3	32.2	42.7	+10.5	43.0	23.2	28.3	+5.1
Maui County	43.9	49.3	50.6	+1.3	42.7	36.0	43.1	+7.1	37.1	20.9	28.3	+7.4
<b>Public School District:</b>												
Honolulu District	47.9	54.2	56.0	+1.8	42.7	37.1	45.5	+8.4	38.7	23.2	29.0	+5.8
Central District	37.1	47.1	50.0	+2.9	41.5	37.4	44.7	+7.3	37.7	22.1	25.8	+3.7
Leeward District	48.7	55.1	56.1	+1.0	44.8	39.7	41.1	+1.4	40.6	23.4	25.4	+2.0
Windward District	48.2	49.8	49.7	-0.1	41.7	30.6	42.7	+12.1	44.5	19.4	28.1	+8.7
Hawaii District	39.3	45.6	52.6	+7.0	39.5	34.0	40.6	+6.6	40.7	23.2	26.4	+3.2
Kauai District	42.1	50.2	47.9	-2.3	36.6	31.4	41.1	+9.7	42.0	22.4	26.2	+3.8
Maui District	44.7	50.3	51.6	+1.3	42.3	35.6	42.1	+6.5	35.4	20.2	26.7	+6.5
<b>Sex:</b>												
Male	48.9	53.7	54.9	+1.2	40.5	34.3	42.3	+8.0	40.5	23.4	27.4	+4.0
Female	41.0	45.7	45.8	+0.1	46.4	39.6	47.7	+8.1	44.0	24.2	28.9	+4.7
<b>Ethnicity:</b>												
Chinese	33.2	39.2	40.7	+1.5	45.2	38.4	44.6	+6.2	42.6	22.9	26.2	+3.3
Filipino	47.6	52.2	50.6	-1.6	47.8	40.2	47.1	+6.9	46.0	25.1	31.0	+5.9
Japanese	35.4	39.1	39.6	+0.5	41.0	34.8	43.6	+8.8	39.6	21.3	23.3	+2.0
Native Hawaiian	53.3	56.4	58.2	+1.8	46.5	41.3	49.9	+8.6	45.0	26.2	31.7	+5.5
White	37.6	44.4	44.7	+0.3	38.2	32.4	40.3	+7.9	39.7	21.4	25.3	+3.9

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**TABLE 75 (continued)**  
**Trends in Risk and Protective Factors by Subgroups, 2000-2003**

(Entries are percentages %)

<i>Prevention efforts should decrease risk factors (R) and increase protective factors (P).</i>	Early Initiation of Problem Behaviors (R)				Favorable Attitudes Toward ATOD Use (R)				Low Perceived ATOD Use Risk (R)			
	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change
<b>Statewide:</b>	40.5	37.3	35.3	-2.0	32.9	35.8	31.6	-4.2	44.1	28.7	26.0	-2.7
<b>Place of Residence:</b>												
City & County of Honolulu	36.7	34.6	32.5	-2.1	30.0	33.6	29.1	-4.5	41.3	26.9	24.3	-2.6
Hawaii County	53.3	45.6	46.5	+0.9	42.8	43.2	41.5	-1.7	52.1	34.7	31.2	-3.5
Kauai County	45.9	41.5	34.9	-6.6	35.5	40.0	29.3	-10.7	50.3	32.2	24.9	-7.3
Maui County	44.8	43.5	39.0	-4.5	36.1	40.2	35.2	-5.0	47.3	32.5	29.9	-2.6
<b>Public School District:</b>												
Honolulu District	33.7	32.1	31.1	-1.0	30.0	30.8	27.8	-3.0	40.5	25.6	24.3	-1.3
Central District	39.7	34.2	33.4	-0.8	33.0	33.4	30.7	-2.7	42.5	26.3	23.7	-2.6
Leeward District	40.6	38.7	36.9	-1.8	27.3	32.2	28.7	-3.5	41.5	29.0	25.7	-3.3
Windward District	45.2	40.8	40.8	0.0	33.3	39.8	33.5	-6.3	43.7	31.5	26.8	-4.7
Hawaii District	53.0	45.4	47.1	+1.7	41.4	41.7	41.6	-0.1	50.6	34.0	30.5	-3.5
Kauai District	46.2	41.4	36.5	-4.9	35.4	40.0	30.6	-9.4	50.7	32.3	25.6	-6.7
Maui District	45.4	44.3	39.5	-4.8	35.5	40.7	34.1	-6.6	46.2	32.9	29.8	-3.1
<b>Sex:</b>												
Male	42.3	39.6	38.3	-1.3	33.5	35.6	30.8	-4.8	46.8	32.3	28.5	-3.8
Female	38.9	35.3	32.3	-3.0	32.1	36.0	31.6	-4.4	41.9	25.5	23.4	-2.1
<b>Ethnicity:</b>												
Chinese	19.4	20.3	18.2	-2.1	24.5	27.0	22.7	-4.3	35.0	20.0	20.9	+0.9
Filipino	38.9	36.0	32.8	-3.2	28.9	32.0	28.2	-3.8	42.2	28.6	23.4	-5.2
Japanese	24.1	23.7	20.5	-3.2	27.5	31.0	26.4	-4.6	39.7	23.0	21.6	-1.4
Native Hawaiian	51.8	48.0	45.9	-2.1	37.0	40.4	35.1	-5.3	47.7	31.8	29.2	-2.6
White	45.5	41.0	37.7	-3.3	39.0	42.3	37.6	-4.7	49.7	30.9	28.6	-2.3

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**TABLE 75 (continued)**  
**Trends in Risk and Protective Factors by Subgroups, 2000-2003**

(Entries are percentages %)

<i>Prevention efforts should decrease risk factors (R) and increase protective factors (P).</i>	Antisocial Behaviors (ASBs) (R)				Favorable Attitudes Toward ASB (R)				Friends' ATOD Use (R)			
	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change
<b>Statewide:</b>	21.2	24.8	26.0	+1.2	39.5	45.6	45.1	-0.5	41.4	45.0	40.2	-4.8
<b>Place of Residence:</b>												
City & County of Honolulu	19.3	23.6	24.5	+0.9	37.6	44.1	43.7	-0.4	38.2	42.6	37.5	-5.1
Hawaii County	27.1	28.7	33.7	+5.0	46.1	52.0	50.1	-1.9	51.1	52.1	49.4	-2.7
Kauai County	22.3	25.1	24.2	-0.9	40.6	45.6	41.8	-3.8	44.8	49.5	40.2	-9.3
Maui County	24.2	28.0	26.3	-1.7	41.3	48.2	48.9	+0.7	46.6	50.9	45.0	-5.9
<b>Public School District:</b>												
Honolulu District	18.0	22.0	24.4	+2.4	38.7	40.6	41.7	+1.1	35.2	39.4	36.7	-2.7
Central District	21.7	22.3	24.1	+1.8	41.4	44.7	46.0	+1.3	40.0	39.9	36.6	-3.3
Leeward District	21.2	26.2	28.2	+2.0	34.0	43.5	41.8	-1.7	39.2	46.9	40.9	-6.0
Windward District	25.4	30.0	29.8	-0.2	40.3	51.4	48.5	-2.9	44.0	47.4	42.8	-4.6
Hawaii District	27.0	28.5	35.0	+6.5	44.8	50.9	49.4	-1.5	50.3	50.9	49.1	-1.8
Kauai District	22.3	25.3	25.7	+0.4	40.3	45.3	43.1	-2.2	44.9	49.5	42.0	-7.5
Maui District	24.5	28.7	26.2	-2.5	40.9	48.2	48.2	0.0	46.5	51.6	44.8	-6.8
<b>Sex:</b>												
Male	25.6	29.8	30.6	+0.8	42.3	48.1	48.1	0.0	39.7	43.6	37.7	-5.9
Female	17.6	20.2	20.9	+0.7	37.1	43.2	42.0	-1.2	42.6	46.0	41.7	-4.3
<b>Ethnicity:</b>												
Chinese	9.2	12.5	13.4	+0.9	34.9	41.3	39.4	-1.9	19.0	23.9	19.1	-4.8
Filipino	18.5	23.0	23.0	0.0	36.9	41.8	41.9	+0.1	40.4	45.4	38.2	-7.2
Japanese	11.4	14.2	15.3	+1.1	34.9	41.7	42.3	+0.6	28.7	30.9	26.7	-4.2
Native Hawaiian	29.1	32.7	33.6	+0.9	39.4	46.3	44.4	-1.9	50.4	56.2	51.6	-4.6
White	23.9	25.5	24.7	-0.8	46.1	51.9	52.1	+0.2	45.7	47.0	41.1	-5.9

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**TABLE 75 (continued)**  
**Trends in Risk and Protective Factors by Subgroups, 2000-2003**

(Entries are percentages %)

<i>Prevention efforts should decrease risk factors (R) and increase protective factors (P).</i>	Interaction with Antisocial Peers (R)				Rewards for Antisocial Involvement (R)				Rebelliousness (R)			
	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change
<b>Statewide:</b>	40.7	46.2	46.6	+0.4	43.2	45.4	40.4	-5.0	32.4	34.3	28.2	-6.1
<b>Place of Residence:</b>												
City & County of Honolulu	38.6	44.7	45.0	+0.3	41.1	43.6	39.2	-4.4	32.0	34.0	28.0	-6.0
Hawaii County	49.0	51.8	53.6	+1.8	51.8	52.7	46.5	-6.2	34.3	35.7	31.6	-4.1
Kauai County	39.9	47.5	46.2	-1.3	44.7	47.0	35.6	-11.4	33.7	32.2	22.9	-9.3
Maui County	42.6	49.5	47.5	-2.0	44.4	49.0	42.0	-7.0	31.6	35.8	27.0	-8.8
<b>Public School District:</b>												
Honolulu District	34.7	41.9	44.3	+2.4	39.4	38.7	36.3	-2.4	29.6	30.7	27.0	-3.7
Central District	41.9	41.9	43.1	+1.2	45.1	43.7	40.0	-3.7	32.8	33.6	25.9	-7.7
Leeward District	40.9	48.9	51.1	+2.2	40.2	45.4	41.3	-4.1	34.4	35.3	30.1	-5.2
Windward District	44.6	50.2	49.8	-0.4	48.5	53.4	43.4	-10.0	32.6	36.2	29.9	-6.3
Hawaii District	49.3	51.3	53.6	+2.3	50.6	51.0	46.4	-4.6	33.7	34.8	31.8	-3.0
Kauai District	39.7	47.8	48.0	+0.2	44.6	46.6	36.6	-10.0	33.9	31.9	23.9	-8.0
Maui District	43.0	50.2	47.4	-2.8	43.8	49.0	40.9	-8.1	31.0	35.6	26.4	-9.2
<b>Sex:</b>												
Male	46.8	52.7	51.8	-0.9	51.4	50.0	45.3	-4.7	37.3	37.9	29.8	-8.1
Female	35.8	40.5	40.8	+0.3	36.8	41.3	35.4	-5.9	28.3	31.0	26.6	-4.4
<b>Ethnicity:</b>												
Chinese	19.9	26.9	27.7	+0.8	34.0	34.4	28.8	-5.6	25.9	27.6	24.9	-2.7
Filipino	39.8	44.9	45.1	+0.2	39.2	40.6	37.2	-3.4	31.7	33.4	27.4	-6.0
Japanese	26.5	32.6	32.0	-0.6	34.3	37.9	31.1	-6.8	25.0	28.5	23.5	-5.0
Native Hawaiian	50.0	56.1	56.3	+0.2	47.1	50.5	43.5	-7.0	37.7	37.7	30.3	-7.4
White	43.7	47.9	46.3	-1.6	50.4	54.1	47.5	-6.6	33.2	35.6	28.7	-6.9

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**TABLE 75 (continued)**  
**Trends in Risk and Protective Factors by Subgroups, 2000-2003**

(Entries are percentages %)

<i>Prevention efforts should decrease risk factors (R) and increase protective factors (P).</i>	Sensation Seeking (R)				Peer Disapproval of ATOD Use (P)			
	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change
<b>Statewide:</b>	43.8	43.8	32.9	-10.9	53.2	53.6	60.1	+6.5
<b>Place of Residence:</b>								
City & County of Honolulu	41.8	42.3	31.5	-10.8	56.5	55.6	61.8	+6.2
Hawaii County	50.6	47.8	38.4	-9.4	41.1	47.6	53.1	+5.5
Kauai County	45.7	47.6	32.5	-15.1	50.2	50.9	63.3	+12.4
Maui County	45.9	47.1	34.6	-12.5	49.3	48.9	56.6	+7.7
<b>Public School District:</b>								
Honolulu District	36.8	35.4	27.1	-8.3	60.5	59.4	63.4	+4.0
Central District	43.8	42.9	31.9	-11.0	54.0	56.8	60.2	+3.4
Leeward District	40.5	42.5	32.3	-10.2	56.2	54.9	60.6	+5.7
Windward District	45.0	48.7	36.6	-12.1	51.0	49.3	59.5	+10.2
Hawaii District	49.4	46.9	37.7	-9.2	42.0	49.0	53.7	+4.7
Kauai District	45.2	47.4	33.7	-13.7	50.5	51.1	61.9	+10.8
Maui District	45.2	46.8	33.2	-13.6	49.6	48.5	57.6	+9.1
<b>Sex:</b>								
Male	51.4	51.1	38.5	-12.6	46.2	48.1	55.4	+7.3
Female	37.7	37.5	27.3	-10.2	58.6	58.4	64.7	+6.3
<b>Ethnicity:</b>								
Chinese	28.2	32.0	21.6	-10.4	68.0	66.2	66.8	+0.6
Filipino	35.9	38.4	27.6	-10.8	56.2	57.5	62.9	+5.4
Japanese	35.0	37.1	26.9	-10.2	62.1	61.1	68.1	+7.0
Native Hawaiian	50.3	49.5	36.3	-13.2	46.2	47.4	54.5	+7.1
White	54.1	53.1	40.1	-13.0	47.1	48.3	57.7	+9.4

(Table continued on next page)

**TABLE 75 (continued)**  
**Trends in Risk and Protective Factors by Subgroups, 2000-2003**

(Entries are percentages %)

<i>Prevention efforts should decrease risk factors (R) and increase protective factors (P).</i>	Belief in the Moral Order (P)				Educational Aspirations (P)			
	2000	2002	2003	'02-'03 change	2000	2002	2003	'02-'03 change
<b>Statewide:</b>	45.5	42.2	47.7	+5.5	44.0	42.7	40.7	-2.0
<b>Place of Residence:</b>								
City & County of Honolulu	46.8	43.1	48.2	+5.1	45.8	44.8	42.5	-2.3
Hawaii County	40.8	38.7	44.9	+6.2	41.5	40.0	36.5	-3.5
Kauai County	43.7	41.7	51.3	+9.6	40.2	36.4	35.6	-0.8
Maui County	44.4	40.5	47.5	+7.0	37.8	37.2	36.5	-0.7
<b>Public School District:</b>								
Honolulu District	48.4	46.2	50.8	+4.6	43.1	39.0	37.8	-1.2
Central District	43.1	41.7	46.9	+5.2	42.7	43.1	41.8	-1.3
Leeward District	46.9	43.3	45.4	+2.1	39.0	38.6	34.1	-4.5
Windward District	45.2	38.5	45.4	+6.9	34.5	39.9	40.8	+0.9
Hawaii District	41.2	39.1	44.4	+5.3	39.8	37.6	33.0	-4.6
Kauai District	43.0	41.8	49.3	+7.5	39.5	35.7	36.4	+0.7
Maui District	44.7	40.1	47.6	+7.5	36.6	35.9	33.9	-2.0
<b>Sex:</b>								
Male	36.6	34.4	41.5	+7.1	37.9	36.6	34.4	-2.2
Female	52.8	49.0	53.3	+4.3	48.8	48.1	46.7	-1.4
<b>Ethnicity:</b>								
Chinese	53.8	46.5	54.2	+7.7	58.6	54.7	50.8	-3.9
Filipino	47.8	45.0	49.9	+4.9	41.4	39.4	37.9	-1.5
Japanese	51.3	47.9	52.4	+4.5	53.7	50.0	48.7	-1.3
Native Hawaiian	42.5	39.0	45.4	+6.4	32.7	36.4	33.8	-2.6
White	43.4	39.2	45.6	+6.4	45.7	43.6	44.0	+0.4

NOTES: Refer to Table 65 for the definitions of each risk and protective factors. *Place of Residence* includes students from public, private, and charter schools. Estimates were determined by weighting the percentage at each grade level by the statewide *N*-sizes at that grade level for that particular subgroup.