

## "Are college-bound students aware of what's "promised" to them? Evidence from Washington State"\*

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**Abstract:** Students making decisions about their education must learn about the costs of attending a given college and the financial aid available to them. However, previous research demonstrates that students and parents have a poor understanding of the actual amount of aid available. Institutional promise scholarships, which advertise and ensure the availability of full tuition funding to low-income students, are an example of a policy designed to affect behavior largely by changing the information that students have about financial aid. We look for evidence that these policies relate to student information about financial aid. Using a data set of aid expectations from high school students in Washington State we find that low-income students expect more funding than their middle- and high-income peers, but that low-income students' expectations of aid do not fully incorporate all available information and are not sensitive to the presence of an institutional promise scholarship.

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## 1.1 Introduction

The decision for low-income students to attend college in the United States depends heavily on the availability of financial aid (Dynarski and Scott-Clayton 2006). In this study we examine low-income students' expectations of aid availability relative to the financial aid available to them. We argue that for policymakers, a college-bound student's "expectation of aid" is a critical behavioral juncture to consider in a low-income student's pursuit of postsecondary education. If a low-income student expects little aid, she is unlikely to persevere through the numerous steps required to enroll in postsecondary education. On the other hand, if a low-income student's expectation of aid is high, we argue this high expectation is likely to motivate her as she navigates the complexities of the college application, admission, and enrollment process. While others have studied particular steps involved with postsecondary enrollment and how public policy may affect those steps (e.g., Klasik 2012; Hoxby and Turner 2013), to our knowledge we are the first to examine the extent to which information about financial aid programs and policies are incorporated in low-income students' expectations of aid available to them and the implications of these aid expectations for policymakers.

We undertook this study with the hypothesis that student expectations should reflect the reality of the postsecondary financial aid policies and programs around them. Compared to students who are not low-income, low-income students should expect more aid to be available. We further hypothesize that students should incorporate knowledge of institution-specific aid programs into their expectations as they learn about those programs and policies while engaging in the college application, admission, and enrollment processes.

Although a general consensus exists around the notion that need-based financial aid increases postsecondary access for low-income students, little is known about how aid programs and policies at postsecondary institutions affects the information that students have about aid. To address this gap and examine to what extent – if any – students incorporate information about financial aid programs and policies in their expectations of aid, we surveyed high school juniors and seniors in Washington State about their backgrounds, postsecondary plans, and expectations for financial aid. We elicited from survey respondents their expectations of available aid at four well-known in-state public universities and the expected primary source of funding at any college. With these survey data we compare student expectations across income status (as measured by receipt of free or reduced-price lunch, or FRPL) and find that compared to their peers who are not low-income, low-income students expect a considerably higher proportion of their college costs to be covered by aid. This finding is intuitive but we find that in describing their expectations, low-income students do not discriminate between colleges and the variation in need-based financial aid advertised at each college. Further, low-income students expect the same amount of aid at universities with and without institutional scholarship programs that cover all tuition costs for low-income students who qualify. Even for low-income students who through being admitted have received a substantial amount of information about the university and thus have received information about these special full-tuition scholarship programs, we find no evidence that these students distinguish between the varying levels of aid offered by each of the state’s four in-state colleges for which we collect survey data.

We structure this paper as follows: In section 2 we briefly review the literature pertaining to college choice making and financial aid policy. In section 3 we discuss our survey data and empirical approach. We present our findings in section 4. We conclude in section 5 with a

discussion of our findings' relationship to extant research and the policy implications of our analysis.

## 2.1 Background

In the standard human capital model, a student faced with a college choice will calculate the expected costs and benefits from each institution under consideration and then choose to enroll where the greatest net benefits are expected. Nurnberg, Schapiro, and Zimmerman (2012) segment the college decision process into three questions. First, where does the student apply? Second, where does the student gain admission? Third, which offer of admissions does the student accept?

The question of college costs ostensibly affects student behavior in question one (the choice of where to apply) and question three (the choice of where to enroll). Recent attention has increasingly focused on the application behavior of college-bound students (question one) due to the ways in which college application behavior facilitates and constrains enrollment choices (question three). Put another way, postsecondary enrollment behavior in the United States is a function of application behavior; to enroll at a college or university, one must first submit an application and gain admission.

Hoxby and Turner (2013) hypothesize that a lack of information about postsecondary opportunities suppresses low-income students' aspirations, which in turn is reflected in their application behavior. . That is, low-income students apply to colleges and universities which are academically inferior to the types of institutions they are actually qualified to attend because they either perceive their likelihood of gaining admission is low or the cost of attending a selective

institution is prohibitive. The authors find that financial aid information tailored to students and their families, combined with low-cost intervention such as application fee waivers, have significant effects on a student's likelihood to enroll at a college that matches her academic qualifications.

Hoxby and Turner's (2013) series of experimental interventions leveraging information about financial aid adds to an already robust body of literature investigating postsecondary enrollment behavior as a function of tuition price, financial aid, and information. The conventional assumption is that low-income students' limited financial means lead them to be highly responsive to tuition prices and thus to financial aid which decreases the cost of attending college. In spite of significant federal, state, and institutional expenditures on need-based financial aid, however, low-income students' postsecondary enrollment lags behind their middle- and high-income peers even when accounting for such nonfinancial factors as academic ability (Bailey and Dynarski 2011).

Related to the ways in which information about financial aid may inhibit a student's pursuit of postsecondary education, we identify three reasons why low-income students' enrollment lags behind their peers. The timeline by which low-income students receive information about financial aid has been suggested as one possible reason; Dynarski and Scott-Clayton (2006) and Heller (2006) argue that low-income high school students must often wait until the winter or spring of their senior year to get accurate and personalized information about the financial aid packages offered from the postsecondary institutions where they gained admission. The complexity in applying for financial aid is another barrier low-income students must overcome in their pursuit of postsecondary education. The Free Application for Federal Student Aid (FAFSA), the federal form which must be submitted by low-income students to

access federal and state aid, is “longer and more complicated than the federal tax return” for the average American household (Dynarski & Scott-Clayton, 2006, p. 2). Bettinger and colleagues (2012) found that offering low-income individuals assistance and a streamlined process to complete the FAFSA led to significant increases in college attendance. An aversion to accumulating debt is the third factor which may deter low-income students from pursuing college. As others have noted (e.g., Singell Jr. 2002; Elliott and Friedline 2013), trends in federal, state, and institutional financial aid policy have shifted toward loans and merit-based aid at the expense of need-based grants for low-income students. If low-income students have a distaste for borrowing the funds necessary to attend college (Burdman 2005; Cunningham and Santiago 2008; Tierney and Venegas 2009), the consequence of this policy shift away from grants in favor of loans represents an additional barrier low-income students and their families face in deciding whether or not the benefits of attending college outweigh the costs.

“Promise” scholarships have been introduced as a financial aid policy that theoretically remedies each of these issues surrounding financial aid. The hypothesized effects of promise scholarships, in which low-income students are “promised” most or all of the financial aid they need to cover the cost of tuition, are twofold. First, promise scholarships simplify the financial aid information a low-income student and her family must consider when 1) making a choice about submitting college applications and 2) making a choice to enroll at a particular institution. Instead of a low-income family being forced to speculate about what type and level of financial aid might be provided, promise scholarships assure a low-income student that tuition costs will be covered. This lowers the financial, time, and psychological costs of learning about the college choice process. Second, promise scholarships are speculated to have an effect on the pre-college academic achievement of low-income students because these students can be relatively certain

they will receive the promised scholarship provided they meet the scholarship's requirements; in this way the promise scholarship may lead a low-income student to work harder and boost her academic achievement because she now perceives postsecondary education to be a more realistic goal (Lips 2011).

A limited body of policy research has emerged focusing on the effects that promise scholarships have on postsecondary behavior. Empirical studies on promise scholarships, which are also called institutional "no-loan" policies, have typically examined how this type of policy affects low-income students' enrollment behavior. In a study examining the effects of introducing an institutional promise scholarship at Harvard, Avery et al. (2006) found that the proportion of low-income students in the freshman class grew, from 14.9% in 2004 to 16.6% in 2005. Avery and colleagues attribute this increase in the proportion of enrolled low-income students to the increased proportion of low-income students in the undergraduate applicant pool for admission to the university in 2005. This increased proportion of low-income students in the undergraduate application pool, in turn, was driven by Harvard's effort to advertise this institutional program of "no-loan" to broad audiences. In a similar scenario, Linsenmeier, Rosen, and Rouse (2006) analyzed the effects of a no-loan financial aid policy's implementation at a highly selective anonymous university and found the offer of a no-loan scholarship increased between 8 and 10 percentage points the likelihood of matriculation for low-income minority students. Finally, Waddell and Singell Jr. (2011) extend beyond the scope of single institutions to examine whether institutional promise scholarships offered by flagship universities influenced the matriculation of low-income resident undergraduates in seven states where those policies existed as of 2007. Waddell and Singell Jr. (2011) suggest that low-income students are indeed

responsive, albeit in “subtle ways,” to financial incentives such as institutional promise scholarships (p. 212).

These studies of enrollment behavior are informative but do not account for whether or not a student has actual knowledge of an institutional promise scholarship. Our analysis of students’ expectations of aid and subsequent application behavior, on the other hand, provides novel insight about the extent to which students internalize information about financial aid. Our logic here assumes a student who internalizes information is more likely to subsequently act on it. This mechanism – that information about institutional promise scholarships will motivate students to apply and attend the institution which offers the scholarship – largely motivates the implementation of institutional promise scholarship policies and programs (Lipps 2011).

University policies and programs that provide promise scholarships trace their roots to the early 2000s when Ivy League colleges and universities began to replace loans with grant aid for low-income students. With the introduction of the Carolina Covenant in 2003, the University of North Carolina at Chapel Hill became the first public university to create an institutional promise scholarship. A host of other public universities have followed suit in recent years by replacing loans with grants for low-income students.

The two largest public universities in Washington State – the University of Washington (UW) and Washington State University (WSU) – offer promise scholarships to low-income resident undergraduates. These institutional promise scholarships (hereafter IPS), known as the Husky Promise at the UW and the Cougar Commitment at WSU, were announced within three weeks of each other in October of 2006. IPSs have since been included in the financial aid packages of resident low-income high school students who apply for admission and are admitted



to either the UW or WSU. Upon their launch, the IPS programs were promoted by university officials and admissions officers throughout the state

As is the case with most IPS programs at public universities, the IPS offered by UW and WSU combine the federal Pell Grant with the state's grant aid for low-income students, the Washington State Need Grant, plus the difference in tuition cost not covered by these two need-based financial aid awards. In other words, a student learns she has received an IPS from UW or WSU and then receives tuition aid from a collection of at least three grants; the Pell, the State Need Grant, and the institutional aid needed to make up these difference between the federal and state grants and the tuition price.

Information about the IPS award is provided to the student by a statement on her financial aid award letter, such as at the UW:

YOU ARE A HUSKY PROMISE STUDENT, AND YOUR GRANTS AND  
SCHOLARSHIPS ARE AT LEAST ENOUGH TO FUND YOUR TUITION  
\*ELIGIBILITY INFO AT [WWW.HUSKYPROMISE.WASHINGTON.EDU](http://WWW.HUSKYPROMISE.WASHINGTON.EDU)\*

This change in policy does not represent a major shift in available funding, but rather a different approach to communicating the availability of funding. A simplification of information is thus the primary mechanism by which an IPS is intended to change behavior. Through simplified information about their likelihood to receive need-based financial aid in the form of grants which will not require repayment, low-income prospective applicants face lower costs in determining their eligibility for aid receipt and are thus more likely to apply to the college offering the IPS; once the student is admitted and receives their financial aid information, the offer of the IPS helps the student and her family recognize that the tuition cost is completely covered by the

university (Avery et al., 2006). This approach is intended to remedy the barrier students and parents alike face in having little credible knowledge about what college costs and how much need-based aid is available. A sizable literature exists which asks students and parents to estimate college tuition and the aid available to cover that tuition; the consistent result emerges that students and parents overestimate tuition and underestimate available aid (Avery and Kane 2004; Usher 2005; Grodsky and Jones 2007; or see Long 2004 for a more comprehensive review).

Ideally this information gap between tuition price and available aid provides low-hanging fruit for policymakers. If policymakers leverage information as a policy tool (Weiss and Tschirhart 1994; Weiss 2002) and improve the information low-income students and families have about the availability of need-based aid, these students and families are more likely to act on such information and increase the rates at which they apply for and enroll in postsecondary education. Aside from IPSs, a number of other information-only or information-focused policy interventions have been designed and tested to modify the information a student has about her postsecondary options. While some interventions are successful at changing beliefs and/or behaviors (e.g., Nguyen 2008; Jensen 2010; Hoxby and Turner 2013), the assumption that individuals will internalize the provided information and further, change their behavior, is not a foregone conclusion. A number of information-only policy and research interventions have found modest or no change in beliefs and behavior (Wiswall and Zafar 2011; Bettinger et al. 2012<sup>1</sup>; Oreopoulos and Dunn 2013<sup>2</sup>). Although IPS policies are a prevalent intervention designed to increase postsecondary access, the literature is inconclusive in terms of how the existence of an IPS translates into either modified beliefs or behaviors.

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<sup>1</sup> While the primary FAFSA intervention covered in this paper was a significant success, the information-only variant had little effect.

<sup>2</sup> Oreopoulos and Dunn found some large changes in information as a result of treatment, but most were very small.

### 3.1 Data

This study uses the Assessing Perceived Costs and Benefits of Postsecondary Opportunities (APCAB) dataset, administered by the authors in May and June of the 2011-2012 academic year. During the period in which the survey was administered, most high school seniors were likely to have received college acceptance letters and financial aid information. APCAB is a voluntary survey of 1,224 high school juniors and seniors in thirteen diverse schools in three districts across the Seattle metropolitan area in Washington State.<sup>3</sup> Students were offered a \$5 gift certificate as incentive for their participation, and the survey was administered with pencil and paper, with a researcher on hand to answer questions. Item nonresponse was addressed using multiple imputation. A description of the students surveyed is found in Table 1. We note that students did not appear to select heavily into the study by socioeconomic status.

[Table 1]

Expected tuition and aid<sup>4</sup> amounts were elicited for four well-known large public universities in Washington State: the University of Washington (UW), Washington State University (WSU), Western Washington University (WWU), and the Seattle Community

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<sup>3</sup> Not all students at each school were presented with the opportunity to take the survey. In about half of survey settings, response rates were over 95%. In other settings, the survey was administered in areas where students could come and go, so the response rate cannot be rigorously calculated. We estimate this rate at 50% based on room size. Overall, 18.9% of all eligible students in the schools took the survey.

<sup>4</sup> In the presented question, “aid” is defined as including grants, scholarships, and loans. While we are not interested in expectations of loans, the analysis as presented does not rely on the number representing only grants and scholarships. Low-income students should have all tuition and fees covered by grants and scholarships alone. We use only the gap between tuition and aid, which we truncate from below at 0. The calculated gap is then an upper bound on the actual expected gap, which is adequate for our purposes.

College system (SCC). The first three are four-year institutions, and SCC is a two-year institution. Geographically, all surveyed students are very close to UW, WWU, and SCC, while WSU's main campus in Pullman, Washington, is approximately 300 miles east of Seattle. UW and WSU offer promise scholarships to low-income students, but WWU and SCC do not. Based on Waddell and Singell's (2011) criteria, UW and WSU are both considered flagship campuses of the state's public university system.

For most of the analysis we focus on the perceived "tuition-aid gap," which we define as the difference between expected tuition and expected available aid as a percentage of expected tuition. We use this variable rather than the raw amount of aid available because the IPS is advertised in a way that emphasizes the amount of aid relative to tuition (since *all* tuition will be covered) rather than advertising a particular dollar amount of aid. Expected tuition varies by student, and so the aid gap gives a consistent picture across students of the expected funding shortfall. We truncate this gap from below at zero because we are primarily interested in whether or not students believe tuition and aid are fully covered, and not the extent to which additional funding is available.

Students were also asked to report what the largest source of funding would be were they to go to college. Options included their own income, their parents' income, loans, and "grants and scholarships." This variable referred to college more generally and did not specify a campus.

The available data thus provides a rich descriptive analysis of aid expectations and how aid expectations interact with institutional promise scholarships. A causal analysis of the effects of an IPS program on expectations about IPS institutions would compare student expectations of aid at IPS and non-IPS colleges before and after exposure to the IPS program. The descriptive effect matches the causal effect if average expectations of aid at IPS and non-IPS colleges are

equal before exposure to the IPS program and motivated students do not opt to learn about the program based on the difference between their expectations of aid at IPS and non-IPS colleges. Juniors and high-SES students have similar expectations for aid at IPS and non-IPS colleges, which lends support to an assumption of the equality of pre-exposure expectations.<sup>5</sup>

To the extent that students with expectations of different levels of aid at IPS and non-IPS colleges actively seek to learn about IPS programs, there is a selection problem in estimating the effect of exposure to knowledge about the IPS on expectations. With the selection problem as stated, that the selection bias in a descriptive analysis is negative if students who expect especially low aid at IPS colleges try harder to learn about IPS programs, and positive if students who expect especially high aid at IPS colleges try harder to learn about IPS programs. Both are plausible, either if students suspect there is something they do not yet know about a low expected offer of aid, or if students try to learn as much as they can about colleges that they already expect to offer a lot of aid. However, for the purpose of our analysis we assume expectations to be fairly equal and thus we suggest that this selection bias is probably negligible, whether positive or negative.

#### 4.1 Findings: The Relationship between Income Level and Aid Expectations

Table 2 compares the basic differences in expectations of tuition and aid between low-income students and all other students. We use a student's report of their receipt of free or

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<sup>5</sup> As shown in Table 3, FRPL juniors have a perceived tuition-aid gap of 28.3% for UW, 21.3% for WSU, and 21.5% for WWU. As shown in Table 2, non-FRPL students have a perceived tuition-aid gap of 27.3% for UW, 27.4% for WSU, and 25.1% for WWU.

reduced price lunch (FRPL), which has slightly stricter qualification requirements than do IPS programs, as a proxy for low-income status.<sup>6</sup>

Figure 1 shows box plots which display the 25<sup>th</sup>, 50<sup>th</sup>, and 75<sup>th</sup> percentiles of the data, as well as the adjacent values (the 25<sup>th</sup> percentile minus, or the 75<sup>th</sup> percentile plus, 1.5 times the inter-quartile range). For tuition and aid, the range of expected values is wide, with some students reporting outsized tuition and aid estimates; this is why we focus on medians rather than means.

Consistent with the literature (e.g. Long, 2004), tuition is overestimated (Panel A) and aid for low-SES students is underestimated relative to true values (Panel B). Tuition is considerably overestimated at the median, but FRPL and non-FRPL students estimate tuition similarly. For each of the four colleges, the distribution of expected tuition is such that the true tuition is at about the 30<sup>th</sup> percentile.

[Figure 1]

Expected financial aid is higher for FRPL recipients than for non-FRPL recipients (Panel B). This aligns with the realities of financial aid in which FRPL recipients who attend college have access to more aid, both from the state and federal governments as well as the college itself (Hoxby & Turner, 2013).

In the expected tuition-aid gap variable (Panel C) we can begin to look for traces of association between students' expectations and IPSs. In the presence of an IPS, the true value of the tuition-aid gap for a FRPL recipient is 0% (or negative, but we truncate the gap at 0%, since

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<sup>6</sup> Free and reduced price lunch eligibility is very similar to State Need Grant eligibility:  
<http://www.k12.wa.us/Communications/PressReleases2012/FreeAndReducedPriceMeals.aspx> ;  
<http://www.wsac.wa.gov/PayingForCollege/SNG/IncomeChart>

we are interested in whether or not students believe they are fully covered). The median expected gaps for all three four-year colleges are significantly different from 0 at the 1% level. For each of the four colleges about 40% of FRPL respondents report an expected gap of 0%, compared to about 28% of non-FRPL respondents.<sup>7</sup> However, we do not see evidence of an impact of the IPS offered by UW and WSU. We base this observation on the fact that students appear to have very similar tuition and aid expectations about UW and WSU, which have promise programs, as WWU, a four-year college which does *not* have a promise scholarship program. FRPL student expectations of tuition, aid and the tuition-aid gap are very similar for all three colleges. The tuition-aid gap for all three is about 35%, and is actually slightly smaller for WWU. For all three colleges, about 40% of FRPL students report a zero expected tuition-aid gap.

Figure 2 illustrates the distribution of the expected tuition-aid gap variable for FRPL recipients across the three four-year universities. The distributions are nearly identical: a heavy concentration at 0 and another, sparser, concentration at .9, which represents the students who are not aware of the aid available for them. If IPS programs were increasing students' expectations of aid, we would expect the WWU distribution to have less density at 0 than UW or WSU. Looking at FRPL students as a whole, it is difficult to find traces of any information gained by exposure to the potential aid offered by an IPS.

[Figure 2]

As shown in Figure 2, while about 40% of FRPL respondents have sufficient information about financial aid conditions to correctly report an expected gap of 0%, we do not see evidence

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<sup>7</sup> The "true" tuition-aid gap for non-FRPL students is difficult to estimate, and so we cannot make many claims about the accuracy of these students' expectations.

of an impact of the IPS offered by UW and WSU. There is no meaningful difference between the three four-year public universities in the number of students who expect zero gap (39.0% at UW, 41.9% at WSU, 41.3% at WWU).

It is possible that knowledge of the promise scholarships only travels to certain groups or at certain times, explaining why we might not see an effect when we examine the overall population surveyed. In Table 2, we compare the median expected tuition-aid gap at the three four-year colleges between FRPL and non-FRPL students in various subgroups. In each case, we separate out a group which we might expect to be more informed about IPS programs. If knowledge of IPS programs affects expectations, then the group which has had more access to this knowledge should have higher expectations of aid. First, we separate out juniors and seniors based on an assumption that seniors have had more time to learn about financial aid options. Second, we separate seniors into those who have completed a FAFSA and those who have not yet, since many students do not hear about the scholarship until after receiving their award letter. Third, we separate seniors who have been accepted to UW or WSU from those who have been accepted to at least one college but not UW or WSU. Students with access to more information should expect more aid at the IPS colleges than at WWU, relative to students with access to less information.

[Table 2]

In Table 2 we again see little evidence that either UW or WSU are effectively transmitting IPS information to low-income students. Intriguingly, while students who have been admitted to UW or WSU tend to have lower expectations of the gap in general, this applies



equally to WWU as it does to the colleges they have been accepted to and, presumably, from which they have received financial aid award letters.

There is little evidence in the tuition-aid gap variable that students adjust college-specific estimates to account for IPSs. However, we can also look at which funding source the student expects will provide the largest part of their funding were they to go to college. The options for this survey question were own income, parent income, loans, or “grants and scholarships.” If IPS programs raise students’ expectations of aid, then FRPL students attending UW or WSU should be more likely to select grants and scholarships as their largest source of funding. FRPL students who applied to UW or WSU but attended a different college form a comparison group in this scenario. Table 3 shows the percentage of students who report scholarships as their major source of funding, broken down by subgroup.

[Table 3]

Again, no evidence emerges that the students are aware of the IPS. A large percentage of FRPL attendees at UW expect a major part of their funding to come from grants and scholarships, and this is large relative to those who were admitted and did not attend. A similar dynamic, however, occurs with WWU.

In general, the evidence is consistent with a framework in which students’ aid expectations carry a large persistent individual component and do not vary much over different colleges. Table 4 reports the correlations between tuition gap expectations at the different colleges. The correlations between aid expectations at the four-year colleges are very high for both FRPL and non-FRPL recipients, and are only slightly lower for students who are planning

to attend one of UW, WSU, or WWU. Many of the students attending UW, WSU, or WWU would have received award letters by the time the survey was administered in May and thus would have had access to college-specific aid information. However, students tend to have high or low expectations of aid regardless of the college for which they are estimating; aid information is not college-specific. If any sources of college-specific aid other than IPS have been offered, they do not appear to make much of a difference either; we would expect these correlations to be lower in the presence of significant college-specific aid.

[Table 4]

The analysis seems to point towards a conclusion that these expectations of financial aid do not appear to have moved in the appropriate direction in cases where particularly salient information (i.e. a financial aid award letter) has been received. The attempts to change student perceptions with IPS marketing is not evident in the data, and students in a position to know more about financial aid availability at a particular focus college do not appear to report different expectations of aid for that college.

## 6.1 Discussion

In this paper we find that student expectations of aid do not vary meaningfully across different institutions. We also find that low-income students do not appear to incorporate college-specific aid programs, specifically institutional promise scholarships, into their

perceptions of aid. Additionally, while some generalized facts about aid are incorporated into expectations, specifically that low-income students receive more than high-income students, in general student expectations do not approximate reality.

Recall that the median low-income student perceives a 31% gap between tuition price and available aid at the University of Washington (Table 2) when the university's institutional promise scholarship program closes this gap to zero for most FRPL students. Since the APCAB sample was collected at high schools within a ten mile radius of the UW, these students among all those in the state are likely to have the best information about available aid. We speculate that elsewhere in the state, low-income students' perceptions of the UW's tuition-aid gap is unlikely to be more accurate.

Low-income students' perceptions of the tuition-aid gap at UW and WSU present a clear policy implication; if students are to have better information to use in choice making and thus a narrower perceived gap between tuition prices and aid expectations, public institutions offering institutional promise scholarships must distribute information about these financial aid programs in a broad, convincing, and effective manner. For example, the Washington Student Achievement Council, a cabinet-level agency in Washington State that oversees public postsecondary institutions, could coordinate statewide outreach efforts between UW and WSU to provide ISP information to low-income students. Based on findings from Avery and Kane (2004), Avery (2010), and Avery and Hoxby (2012) related to the important role high school counselors play in delivering information to college-bound students, the UW and WSU could also efficiently deliver ISP information to low-income students through the students' high school counselors vis-à-vis institutional outreach to the counselors themselves or to the counselors' professional associations in the state (e.g. Pacific Northwest Association for College Admission

Counseling or the Washington School Counselor Association). The effectiveness of an ISP ultimately depends on low-income students' knowledge of such a program; given that we find little evidence that any such efforts of UW or WSU are closing low-income students' perceptions of the tuition-aid gap, whatever policy or program put in place to provide information must extend beyond those efforts currently underway.

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## Figures and Tables

Table 1: Survey Respondent Demographics

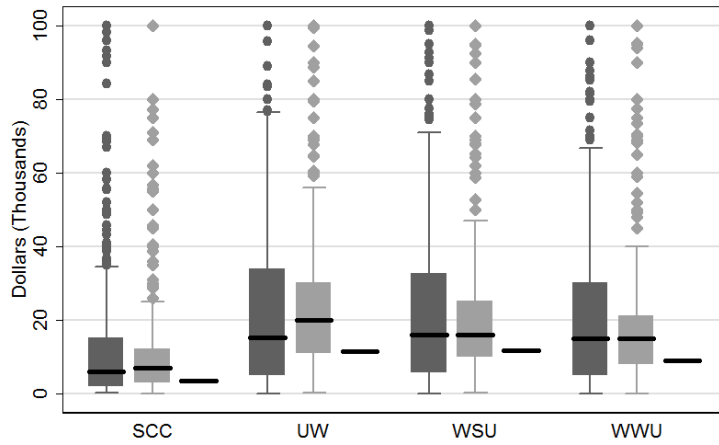
Female:	48.5%
Race/Ethnicity (non-exclusive):	
White	57.0%
Black	15.8%
Asian	19.8%
Hispanic	18.3%
Status in High School:	
Senior	53.8%
GPA (Self-reported)	3.21
Family background:	
FRPL Recipient	45.5%
At least one guardian has a BA	55.4%

*N* = 1,224

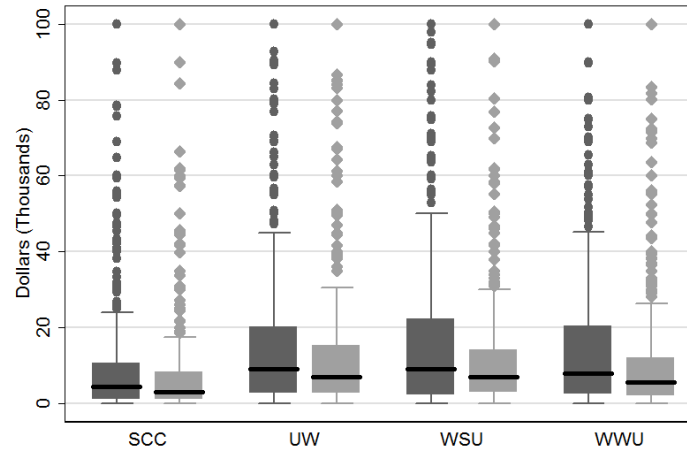
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Figure 1: Expected Tuition and Aid at Select Washington Public Universities

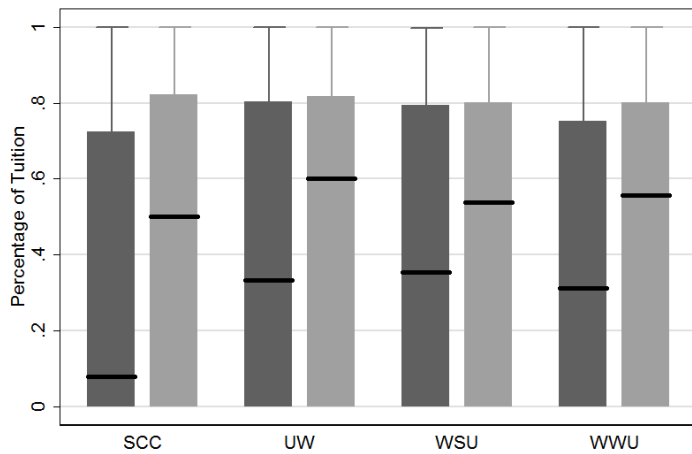
Panel A: Expected Annual Tuition and Fees



Panel B: Expected Financial Aid



Panel C: Tuition Gap as Percentage of Tuition



FRPL  
 No FRPL  
 Line Only Reality

Figure 2: Distributions of FRPL Expected Percentage Tuition-Aid Gap by College

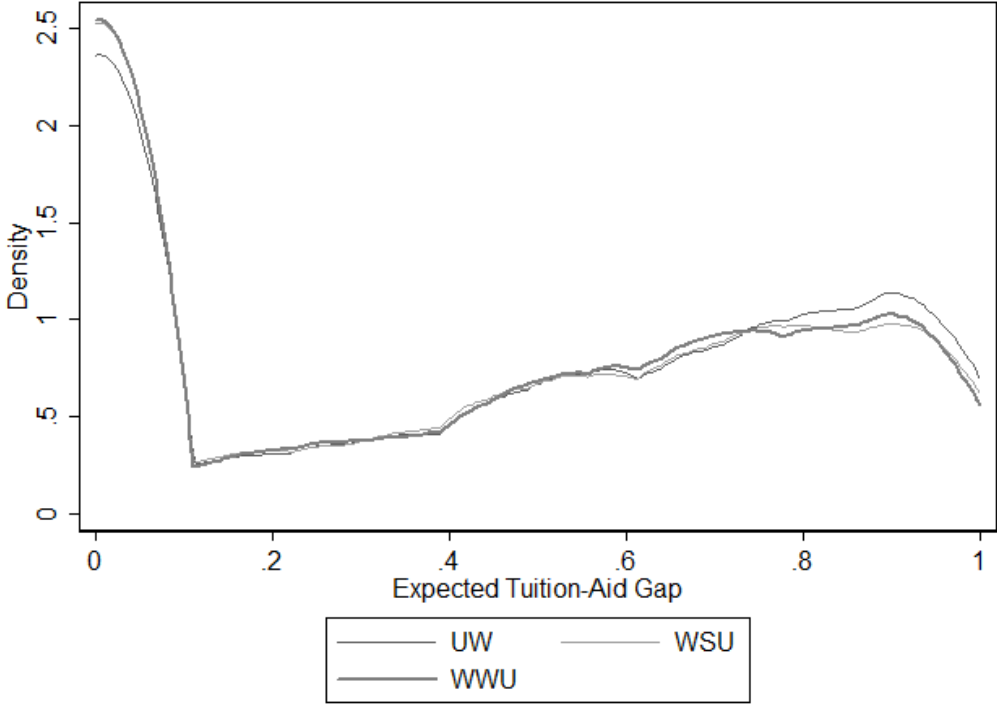


Table 2: Median Tuition Gap Across Subgroups

	Prevalence	UW	WSU	WWU
Seniors	53.8%			
	FRPL	34.3%	29.7%	30.2%
	No FRPL	59.2%	54.5%	54.3%
	Difference	24.9%***	24.8%***	24.1%**
Juniors	46.2%			
	FRPL	28.3%	21.3%	21.5%
	No FRPL	57.0%	52.0%	51.2%
	Difference	28.7%**	30.7%**	29.7%**
Seniors who have completed FAFSA	65.5%			
	FRPL	31.3%	23.6%	28.0%
	No FRPL	61.1%	56.1%	56.8%
	Difference	29.8%***	32.5%***	28.8%***
Seniors who have not completed FAFSA	34.5%			
	FRPL	33.4%	28.8%	27.1%
	No FRPL	54.5%	51.5%	50.5%
	Difference	21.1%*	22.7%**	23.4%**
Seniors admitted to UW or WSU	38.2%			
	FRPL	27.0%	22.9%	25.1%
	No FRPL	57.2%	51.5%	55.4%
	Difference	30.2%**	28.6%***	30.3%**
Seniors not admitted to UW or WSU	61.8%			
	FRPL	35.1%	29.1%	26.6%
	No FRPL	60.6%	55.3%	53.9%
	Difference	25.5%**	26.2%***	27.3%**

\*, \*\*, \*\*\* indicate statistical significance at the 10, 5, 1% levels

Table 3: Percentage of Students Expecting Scholarships as Major Source

	FRPL	No FRPL
All seniors	52.6%	25.5%
Attending UW	72.7%	21.7%
Admitted UW	52.9%	32.0%
Applied UW	68.6%	25.3%
Attending WSU	51.8%	29.4%
Admitted WSU	40.0%	22.2%
Applied WSU	50.0%	21.9%
Attending WWU	69.0%	27.6%
Admitted WWU	52.2%	28.9%
Applied WWU	49.3%	26.1%

Table 4: Correlations Between Tuition Gap Expectations

	FRPL					No FRPL			
	UW	WSU	WWU	SCC		UW	WSU	WWU	SCC
UW	1	.784	.777	.571	UW	1	.783	.781	.528
WSU		1	.778	.572	WSU		1	.792	.546
WWU			1	.608	WWU			1	.614
SCC				1	SCC				1
	All Students					Attending UW, WSU, or WWU			
	UW	WSU	WWU	SCC		UW	WSU	WWU	SCC
UW	1	.790	.786	.558	UW	1	.754	.718	.505
WSU		1	.795	.557	WSU		1	.744	.503
WWU			1	.618	WWU			1	.592
SCC				1	SCC				1