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Academic Probation: Evaluating the Impact of Academic Standing Notification Letters on Students

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1. Executive Summary

Improving student outcomes is a primary goal for all postsecondary institutions. This report includes the first set of results for our HEQCO-funded research project, “Evaluating the Impact of Academic Standing Notification Letters on the Experience and Retention of Students.” This study aims to understand the effectiveness of an intervention designed to improve the psychological and academic outcomes of students who have not made adequate academic progress during an academic term at Mohawk College, a community college in southern Ontario.

Furthermore, this study aims to contribute to the growing body of literature that examines the impact of “psychologically attuned” academic probation letters on student outcomes by testing this innovative approach to student communications in a new context — the Canadian community college. Psychologically attuned communication includes the implementation of five key strategic revisions to probation notification letters (detailed later in this report) and takes into consideration students’ experiences of these notifications in an attempt to reduce feelings of shame, stigma and guilt. This innovative approach was developed by Shannon Brady, her colleagues at Stanford University and the College Transition Collaborative in order to decrease the likelihood of students who are placed on probation from dropping out of their program. Since Mohawk College has multiple levels of academic standing (Promote with Good Standing, Promote with Advice, Probation and Compulsory Withdrawal), this study is also able to consider the impacts of psychologically attuned notification letters for multiple academic standings, rather than just academic probation, as considered in previous studies. While the processes associated with status notifications for students placed on Promote with Advice and Probation are administered in order to get students back on track academically, what is often overlooked in policy and practice is the potential punitive and disparaging impact of these communications, especially for students placed on Compulsory Withdrawal.

Phase one of the intervention involved refining, evaluating and implementing psychologically attuned academic standing notification letters for students with academic statuses other than Promote with Good Standing. These psychologically attuned letters are designed to clearly communicate information about relevant policies and procedures but also clearly address students’ likely psychological concerns about their academic status.

Three distinct components of this work are discussed in the present report:

- An **online student survey** (given to 150 students) designed to better understand the experience of those who were previously placed on an academic status other than Promote with Good Standing
- **Iterative testing and refinement** of the notification letters based on interviews and focus groups with a total of 35 students
- **Analyses of administrative data from more than 30,000 students** to better understand the academic outcomes of Mohawk College students placed on different academic standings over time, especially how these academic outcomes might differ for students placed on probation *before* the use of a psychologically attuned notification to inform students of their status (i.e., before winter 2017) versus *after* (i.e., from winter 2017 onwards)

Offered in this report are the results of the experimental work undertaken as part of the first phase of this three-year research project.

Our key preliminary findings include:

1. Students reported feeling strong negative emotions when placed on a status other than Promote with Good Standing, with progressively more negative feelings for students in more severe academic statuses (See Figure 5).
2. Through all three evaluation approaches (online survey, interviews and focus groups), students consistently reported a more positive emotional response to the psychologically attuned letters. More specifically, in an experimental test, compared with students who read Mohawk's previous letter, students who read the attuned letters said they would feel more hopeful (see Figure 6), more supported by their school (see Figure 7) and more like the letter was designed to let students know that faculty and staff care and are concerned about them (see Figure 8).
3. The data suggests that communication developed in a way that *does not* consider the psychological impacts of these notification letters can negatively affect the student experience and how these students feel toward the person and institution sending them.
4. Although causal claims cannot be made, administrative data from Mohawk College during the period when psychologically attuned letters were adopted is consistent with an improvement in students' academic outcomes, including an overall increase in students' subsequent term GPA by 5.8 percentage points or a 10.6% relative improvement for students on Probation and Compulsory Withdrawal (see Table 11).

The first phase of our project has allowed us to explore if implementation of psychologically attuned student communication *has* positive implications for student academic performance and emotional response, as well as *how* this positive response is attained. Figure 1 represents the positive responses psychologically attuned letters received.

Figure 1: Overall Impacts of Psychologically Attuned Letters

Is there evidence of a benefit from psychologically attuned letters?			
Student Feedback		Student Feedback Reported Feeling	
Online Student Survey	✓	Hopeful	✓ *
Interviews	✓	Supported	✓ *
Focus Group	✓	Motivated	✓ ^
Administrative Data			
Student GPA	✓ ^ε	Connected with Resources	✓ ^
Retention Rates		Cared About	✓ **

✓ Denotes a positive correlation.

^ε $p < .001$

[^] $p < .10$; means are raw; analysis controlled for students' promotion status in Fall 2016

* $p < .05$; means are raw; analysis controlled for students' promotion status in Fall 2016

** $p < .01$; means are raw; analysis controlled for students' promotion status in Fall 2016

Engaging students throughout the iterative development process is integral to developing psychologically attuned letters that are relevant to the institution's student body. We are greatly appreciative of the expertise that Shannon Brady has brought to Mohawk and are encouraged by the positive results we already see in this initial implementation phase.

2. Introduction

The following report begins by providing an overview of the current project, including a review of current literature that supports the efficacy of psychologically attuned academic notification letters. The report also provides a description of academic standing notification processes at Mohawk College.

The focus of the second half of this report is on developing a picture of the current study by providing details of the research design and methods, as well as our initial findings. These key findings lead into our discussion of implications for practice and policy that arise from the positive results and successful implementation of psychologically attuned notification letters at Mohawk College.

Overall, this report highlights the power of both iterative and collaborative processes to improve the student experience and offers tangible considerations for college practitioners and administrators. These results are informative for administrators, practitioners and researchers alike. Each group of stakeholders benefits from the findings that written communication matters. The data suggests that poorly crafted communications can cause real harm to students and affect how students feel toward the person and institution sending them. The data also suggests that carefully crafted communications that consider the potential feelings of the students reading them can increase the degree to which positive feelings are experienced.

We will conclude this report with a summary of the next phase of this research project.

2.1 The Academic Standing Process and Student Outcomes

Almost all colleges and universities have processes to identify and support students who are struggling academically. At Mohawk College, as at many other colleges, when a student is not meeting academic benchmarks these processes include placement on an academic status other than Promote with Good Standing and formal notification about the change in academic status. While many colleges only have a single academic status other than Promote with Good Standing (usually Probation or Warning), Mohawk College has three, including Promote with Advice, Probation, and Compulsory Withdrawal. Each of these statuses are described in [Section 4](#) of this report.

While we understand that the processes for students placed on Compulsory Withdrawal are intended to remove students who are failing from their programs, the processes for students placed on Promote with Advice and Probation are meant to help these students get back on track. What is of concern is that little research exists on students' experience with academic standing and how effective different practices are in supporting student recovery to good standing. The research that does exist indicates that many students placed on probation do not return to good standing expeditiously or, in some cases, do not go on to receive their credential. Furthermore, a study conducted at three Canadian universities found that placement on probation *itself* (rather than poor academic performance per se) decreased students' likelihood of staying enrolled (Lindo, Sanders & Oreopoulos, 2010).

Research by Shannon Brady and her colleagues at Stanford University and the College Transition Collaborative (CTC) suggests that a possible explanation for this negative effect is that placement on probation makes students feel ashamed and concerned about stigmatization, which leads them to withdraw from academic supports and sometimes even their institution (Brady et al., forthcoming). But severe shame and withdrawal are not inevitable; implementing four key strategic revisions to academic standing notification letters — which yields letters that we refer to throughout this report as *psychologically attuned notification letters* — can lead students to experience less severe negative feelings, and can make students more likely to stay engaged and promote their academic recovery. The elements of psychologically attuned notification letters are described in Table 1.

3. Literature Review

Earning a postsecondary credential is one of the surest paths to upward mobility today, yet too many college students do not graduate (d’Addio, 2007). In light of this, colleges and universities have several mechanisms to warn students that they are at risk of not making sufficient progress and help students get back on track. Academic standing is one such mechanism. It involves formally notifying a student that they are not making satisfactory academic progress, usually because their grade point average (GPA) has fallen below a certain cut-off and/or they have not accrued enough credits in a given time period. Students placed on an unsatisfactory academic status (most commonly called Probation or Warning) are typically required to meet a certain GPA and/or unit accrual threshold to return to good academic standing. Often, students placed on unsatisfactory academic statuses are required or encouraged to participate in supplemental student support services (e.g., Earl, 1988). Students who do not meet the academic threshold to return to good standing or who do not participate in required supplemental programs may be dismissed from their program.

3.1 Consequences of Academic Standing Practices

Almost every postsecondary institution in both the United States and Canada has an academic standing process, and even very conservative estimates suggest that the practice affects hundreds of thousands of college students annually (Fletcher & Tokmouline, 2010; National Center for Education Statistics, 2012). Yet little research has examined whether or how the academic standing process supports students’ return to good standing and ultimate receipt of a postsecondary credential. Many students placed on unsatisfactory academic statuses do not return to good academic standing expeditiously or ever (Lindo, Sanders, & Oreopoulos, 2010; Oklahoma State Regents, 2000; UC Berkeley Office of Planning & Analysis, 2013). Certainly one reason involves factors that led students to be placed on an unsatisfactory academic status in the first place, such as academic underpreparedness; ineffective instruction; insufficient motivation, skills or campus resources; or financial, physical health or mental health issues (Balduf, 2009; Hsieh, Sullivan, & Guerra, 2007; Isaak, Graves, & Mayers, 2006; Kelley, 1996). But quasi-experimental research also implicates placement on unsatisfactory academic standing itself. A regression discontinuity analysis conducted at three Canadian universities found that students who barely met the cut-off for probation were more likely to drop out of the university subsequently than functionally equivalent students just above the cut-off (Lindo Sanders & Oreopoulos, 2010). This raises the question: Why might placement on probation *itself* undermine student success?

A critical and underappreciated aspect of this situation may be that people commonly understand themselves to be in a kind of relationship with valued institutions that structure their lives — including schools. Notification that one is not meeting community standards, especially when the notification comes from a valued institution itself, may place this relationship at risk. Insofar as a student’s relationship with their school is deeply valued and experienced as a sense of belonging (Walton & Brady, 2017), notification that they have been placed on probation may lead students to feel ashamed, be concerned that they are (or will be) stigmatized, and ultimately withdraw from the school context (Corrigan, 2004). Yet importantly, this analysis implies, designing academic standing notifications in ways that address students’ concerns about devaluation and belonging may mitigate students’ negative psychological responses and improve their recovery to academic standards.

According to this theory, it is not simply the factors that originally led the student to not meet academic standards that cause negative outcomes but also how the institution communicates about and represents the student’s academic status. This approach thus draws on and extends a central theme of social-psychological research: that the subjective construal or meaning of an event, apart from its objective nature, shapes people’s responses and can be modified for good (e.g., Ross & Nisbett, 1991; Walton & Wilson, forthcoming).

3.2 Students Experiences on Academic Probation

Few studies have examined the psychological experience of students placed on probation or other unsatisfactory academic statuses — how it feels to the student (Ross & Nisbett, 1991). However, one small but suggestive qualitative study ($N=8$) found that students on probation reported heightened concerns about belonging and esteem (Silverman & Juhasz, 1993). In trying to make sense of the institution’s motives and beliefs toward them in this circumstance, students may experience a profound state of attributional ambiguity (see Crocker, Voelkl, Testa & Major, 1991; Major, Feinstein & Crocker, 1994). On the one hand, placement on probation communicates to students that their performance is so unsatisfactory in the eyes of the institution that their affiliation with the institution could be terminated. As such, probation is an overt and imminent threat. Students could easily feel labeled — marked as other, deviant or deficient. Indeed, students in the qualitative study mentioned earlier specifically described disliking the label “probation” (Silverman & Juhasz, 1993). Probation may thus evoke a state of social disgrace whereby the student has acquired a “spoiled identity” that precludes full membership in the school community (Goffmann, 1963). On the other hand, probationary notifications typically seek to connect students with resources and encourage them to improve. Students may read this content in a notification and strongly desire to embrace it and to see themselves capable of improvement (not as having a “spoiled identity”). Yet if notifications do not directly address the inherent threat to their relationship with the institution, students may have difficulty securely holding to a more positive construal.

Addressing this gap in the literature, research by Shannon Brady and her colleagues has found that students at a selective private university who were currently on probation or who had previously experienced probation described the probation process as characterized by high levels of negative emotions and concerns about devaluation and belonging (Brady et al., forthcoming). When describing their experiences with the academic probation process, over half of the students specifically mentioned the probation

notification letter. Many explicitly connected it to their feelings of devaluation and non-belonging. For example, one student said, “I had already felt [like I didn’t belong] coming in [to the university], but that letter seemed to confirm that...I wanted to drop out.” Brady and her colleagues suggested that typical probation practices — including the school’s standard notification letter — were leading students to feel ashamed and to wonder, “How am I viewed by the institution?” and “What does probation mean for me and my relationship with the institution going forward?”

Are high levels of shame and concerns about belonging and stigmatization inevitable when an institution notifies a person that they are not meeting standards? Brady and her colleagues argue that they are not (Brady et al., forthcoming). If shame and stigma arise because institutions are often insensitive to people’s relational concerns and send communications that are unclear about the consequences of a probationary status for that relationship, then directly addressing these issues may be able to attenuate these negative feelings and reduce disengagement.

To test this claim, Brady and her colleagues have developed academic standing notification letters that strive to be clear about institutional academic policies but also *attuned* to students’ concerns about belonging and devaluation by proactively providing adaptive answers to the questions articulated above (Brady et al., forthcoming). These letters strive to convey that students are seen as normal (not deviant or deficient), and despite facing legitimate challenges, as fundamentally capable of growth.

Working in partnership with the selective private university at which the descriptive study mentioned above was conducted, Brady and her colleagues created this “psychologically attuned” probation notification by revising the university’s standard probation notification letter and by appending a second page to the letter with student stories about the probation process. The attuned letter employed four key design strategies, listed in Table 1. Although the strategies are articulated separately, they work together and reinforce each other to convey to a student being placed on probation that the institution values them, sees them as a person of worth, and forecasts a positive future for them at the institution.

Table 1: Psychologically Attuned Letter: Key Questions and Letter Development Strategies

Student Concerns
<ul style="list-style-type: none"> • How am I viewed by the institution? • What does probation mean for me and my relationship with the institution going forward?
Strategies to Provide Adaptive Answers to Students’ Concerns
<ul style="list-style-type: none"> • Describe probation as a process of learning and growth, not a label • Acknowledge specific non-pejorative factors that contribute to academic difficulty • Communicate that it is not uncommon to experience academic difficulties • Offer hope of — and support for — returning to good academic standing

Figure 2 illustrates the content of the university’s standard probation notification letter and the content of the psychologically attuned probation letter developed for the selective university; key differences between the two letters are annotated.

Figure 2: Illustrative Standard Probation Notification Letter and Psychologically Attuned Probation Letter, with Changes Annotated

Illustrative Standard Letter	Illustrative Attuned Letter, Annotated
<p>“...You will be placed on academic Probation effective [Term]. Let me make very clear that Probation at [School] is a warning, nothing more, and will not appear on your official transcript. Its purpose is to alert you to academic difficulties in time to identify those areas where you may be experiencing problems and determine how best to address them.”</p> <p>“Placement on academic Probation is a part of the University’s commitment to offer students support for—and guidance through—whatever difficulties they may have experienced.”</p> <p>“If you do not meet these conditions, you may be at risk for Restricted Registration status or Suspension.”</p>	<p>“...You will have an academic probation status beginning [Term]. This process is simply designed to alert you to academic difficulties in time to help you identify those areas where you may be experiencing problems and determine how best to address them. It will not appear on your official transcript. Additionally, if you meet the requirements for satisfactory academic progress, this probationary status will end.”</p> <p>“There are many reasons students enter the academic probation process. These reasons can include personal, financial, health, family, or other issues. Our goal is to help you identify the factors that are relevant to you and to help you address them. You should also know that you are not alone in experiencing these difficulties. Many students enter and participate in the probation process each year, and by working with their advisors, many leave the process and continue a successful career at [School]. For descriptions of the experiences of some past students who have gone through this process, please see the attached document, <i>Students’ Perspectives on the Probation Process</i>.”</p> <p>“We are confident that you can meet these standards. However, it is important that you take steps to address the causes of your academic difficulties. If these conditions are not met, you may be at risk for restricted registration status or suspension.”</p> <p><i>Students’ Perspectives on the Probation Process. Sample story:</i> “When I failed an important math class, I was devastated. If anything, getting the probation notice made me feel worse. I thought I was the only one having a hard time. Eventually, I got up the courage to talk to my RA...I was so worried what he would think. But I’ll never forget his response. He told me, ‘You’d be surprised how many times I’ve had this conversation. Every time a person walks in thinking they are the only one, but really, lots of students struggle.’ I saw that there’s no shame in struggling academically—everybody does some time. It’s all about how you respond. I learned something important in the process, about how to face up to challenges, to reach out to others for help, and find a way forward. That was some time ago, and I can see now that the process was productive for me and helped me grow as a person and as a student.”</p>
	<p>Frame probation as a process, by both explicitly calling it a process and de-capitalizing the word</p> <p>Remove unnecessary legalese</p> <p>State explicitly that probation ends when requirements are met</p> <p>Acknowledge specific non-pejorative factors that contribute to academic difficulty</p> <p>Represent the student as agentic and capable</p> <p>Normalize academic difficulties</p> <p>Represent seeking institutional support as an effective means to improve</p> <p>Emphasize belief in student’s ability to return to good standing</p> <p>Communicate clearly about requirements</p> <p>Acknowledge that probation can elicit negative feelings and worries</p> <p>Illustrate ways students can access support</p> <p>Normalize academic difficulties</p> <p>Describe probation as a process of growth and learning</p> <p>Frame accessing institutional support as a vehicle for growth and learning</p>

Across several laboratory studies, Brady and her colleagues found that this psychologically attuned probation notification letter reduced students’ anticipated feelings of shame, concerns about stigmatization, and intentions to disengage from college (measured by their likelihood to consider dropping out) compared to the school’s standard probation notification letter (Brady et al., forthcoming). These outcomes are important in their own right: no school wants to be in the business of fostering shame and stigma. But they are also important to the extent that students who feel less ashamed and stigmatized may be more likely to be able to undertake the actions necessary to return to good academic standing (Pekrun, 2017). Indeed, in a randomized controlled field trial among students being placed on probation at a selective private university, students who received the psychologically attuned letter were more likely to still be enrolled at the institution a year later compared to students who received the university’s standard letter — by more than 30 percentage points (Brady et al., forthcoming). Though these results are promising, they were obtained primarily in one cohort of students at one highly selective university in the United States. What are students’ experiences of being placed on academic status like at community colleges? At schools in Canada? Could psychologically attuned notification letters improve the outcomes of students at community colleges and in Canada?

4. Academic Standing Notification at Mohawk

Mohawk College is committed to a consistent, equitable and transparent process that facilitates students' progressions through their chosen programs of study to graduation. College policies and procedures related to progression and promotion have been developed to best support students in their academic advancement from term to term.

The academic standing process at Mohawk College is designed to help students understand and monitor their academic progress. The process consists of assignment of statuses denoting different levels of academic progress, notification to inform students of their academic status, and the provision of additional resources to support the academic progress of students not currently meeting academic expectations.

As noted previously, Mohawk has four different academic statuses: Promote with Good Standing, Promote with Advice, Probation and Compulsory Withdrawal. A student's academic status is based on their weighted GPA and the number of courses they have passed or failed (with some exceptions for specific programs). The status is calculated and determined automatically using internal software and then reviewed and confirmed by the faculty, administrators and staff in the student's program during *promotion meetings* held at the end of every term. Each academic status has an accompanying set of policies, procedures, and supports associated with it. Students' academic statuses, as well as the relevant policies and supports, are communicated to students through an academic standing notification letter sent to their email address. The status is also noted in their online portal.

4.1 Academic Standing Statuses

Through a variety of targeted retention initiatives and support programs, Mohawk College continually demonstrates its commitment to the academic success of all of its students. However, each winter term, about 3,000 students (nearly 30% of the student population) do not meet the academic requirements to be promoted in good standing — the desired academic standing representing successful progression from one term to the next.

Depending on their performance, students receive one of four statuses:

- **Promote with Good Standing – (an average of roughly 72% of population)**
Students will be allowed to progress from one semester to the next with attainment of a minimum weighted GPA greater than or equal to 60% with no failures.
- **Promote with Advice – (an average of roughly 11.5% of population)**
Students who are on Promote with Advice have achieved a weighted GPA of 50% or higher, with no more than one failure. These students have successfully completed their semester but are strongly encouraged to seek academic advice from their Student Success Advisor to help them enhance their academic performance during the next term. Here, the goal is for students to recognize that one failure has the potential to compromise progression from one semester to the next, and several failures may prohibit the student from achieving graduation status within the timelines outlined by their programs of study.

- **Probation – (an average of roughly 5% of population)**
Students are placed on Probation if they achieve a weighted GPA of 50% or higher with more than one failure. These students may be allowed to progress to the next term with *special authorization* through the mandatory academic advisement process. Consequently, students on Probation must meet with their Student Success Advisor before they can register for their courses for the next term.
- **Compulsory Withdrawal – (an average of roughly 11.5% of population)**
Students who have a weighted GPA of less than 50% are placed on Compulsory Withdrawal, and are required to leave their program. These students are strongly encouraged to seek advisement to explore opportunities for continuing their studies, such as taking courses to upgrade their standing or applying for a different program.

4.2 Implementing Psychologically Attuned Notification Letters at Mohawk College

The typical development and evaluation process for revising standard notification letters into psychologically attuned notification letters, developed and refined by Shannon Brady and her colleagues at Stanford University and the College Transition Collaborative, is described broadly in Table 2.

Table 2: Typical Iterative Development and Evaluation Process

1.	Conversation with school administrators about students' experiences with academic standing and the likely fit of an attuned letter at the school
2.	Development of an initial attuned letter for the school
3.	Survey with students previously on probation (or more severe status) at the school
4.	Revision of the attuned letter for the school
5.	(As needed) Interviews and/or focus groups with students
6.	Input from administrators and staff
7.	Further revision of the attuned letter for the school
8.	Second survey with students to experimentally test the attuned letter's effectiveness
9.	Final revision of the attuned letter
10.	Experimental evaluation of the letter among students actually being notified of their academic standing

Steps #1 and #2 above were included in the initial pilot, which occurred prior to the formal start of this research project. However, with administrative support for this project, we have undertaken steps 1–7 in this first phase of our project, including some additional iterations of the letter. Steps 8–9 will be included in future phases of this project. For this current phase of the research, Mohawk College opted for a pre-post evaluation of the letters instead of Step 10.

The research team for this project hypothesized that psychologically attuned academic standing notification letters have the potential to improve students' outcomes in a number of ways. First, consistent with past research (Brady et al., 2018), we think they are likely to reduce students' feelings of shame and concern

about stigmatization. These are important outcomes in and of themselves, especially given mounting concerns regarding mental health on college campuses. Second, to the extent that students are feeling less ashamed and are more likely to use academic services, they may be more likely to recover to good standing.

Given this, the primary goal for this project is to customize, implement and evaluate psychologically attuned academic standing notification letters that support student success and retention. Initial work to understand students' experiences in the academic standing process began in the spring of 2017 at Mohawk College, prior to receiving funding for this project from HEQCO. Mohawk College collaborated with Shannon Brady to craft an initial set of psychologically attuned notification letters for students being placed on Probation and Compulsory Withdrawal statuses. About a dozen administrators and professional advisors reviewed the letters and provided initial feedback that was incorporated into the new revised letters. The letters were completed about a week before the end of the spring 2017 term and sent to students receiving these statuses a few days later. These letters are the initial pilot letters.

The tight timeline required to have revised letters ready for the end of the spring 2017 academic term meant that Mohawk College did not have the opportunity to engage in a full development and evaluation process before the release of the initial pilot letters; however, this process was completed with the pilot letters prior to the end of the winter 2018 term. It was especially important that this process, which includes a descriptive survey of students' experiences with the academic standing process, be completed because, as noted above, Mohawk College is the first institution in Canada and first two-year college *anywhere* to test this approach. Completing this process allowed the research team to gather insight into students' experiences of academic probation as well as student feedback on the attuned letters.

Below is an outline of the different versions of the academic standing notification letters at Mohawk College as the project team worked to develop psychologically attuned notification letters specific to Mohawk. When you follow the process taken, five versions of the letter were created in order to reach our final spring version of the psychologically attuned letters.

- **Standard letters** – All Mohawk College notification letters used prior to the winter 2017 term.
- **Pilot letters** – These letters were revised by the team using the “illustrative attuned letter” (Figure 2) as a model. These letters were sent to Mohawk students placed on Probation and Compulsory Withdrawal statuses in April 2017, August 2017 and December 2017. These were also the letters sent to students completing the online student survey. During this phase of the project, no change occurred to the standard Promote with Advice notification letter.
- **Revised letters 1.0** – Notification letters were revised a second time by Shannon Brady using feedback from the online student survey. Letters for all three statuses — Promote with Advice, Probation and Compulsory Withdrawal — were revised during this second phase. These were the letters used during student interviews in February 2018.
- **Revised letters 2.0** – Notification letters for all three statuses were revised a third time by Shannon Brady using feedback from student interviews. These were the letters that were used during student focus group discussions in March 2018.

- **Attuned letters** – Notification letters for all three statuses were revised a fourth time by Shannon Brady using feedback from focus groups, resulting in our final spring version of all three notification letters.

For the purposes of this report, we will refer to all letters prior to the winter 2017 attuned letters as the “standard letters,” meaning that they were not created using the psychological attuning process. The final spring version of all three notification letters will be the notification letter sent to students placed on Promote with Advice, Probation and Compulsory Withdrawal in April 2018, at the end of the winter 2018 term. Furthermore, the final spring version letters will continue in the iteration process, as we will further test and gather student feedback during phase two.

5. Research Design and Methods

We used a multi-stage mixed method iterative process to draft, refine and evaluate our academic standing letters (as per Table 2), including some additional steps to ensure the production of the highest quality letters possible. This approach was used in order to gain qualitative data on the student experience of receiving academic standing notifications, as well as quantitative data to uncover the impacts of implementing psychosocially attuned status notification letters.

5.1 Research Questions

This section describes the research program and the three different data sources analyzed for the present report. For this portion of the project, we focused on two overarching research questions:

- How do students feel, respond to and make meaning of their experience when their grades are such that they are placed on an academic status other than Promote with Good Standing?
- How do different kinds of notification letters about failing to maintain good academic standing (standard versus psychologically attuned) affect students’ feelings, behaviours and academic outcomes?

To answer these questions, we drew from three data sources: an online student survey, student interviews and focus groups, and administrative data. This mixed-methods approach allowed us to address our two overarching research questions, as described in Table 3.

Table 3: Mixed Methods

		Data Type	
		Qualitative	Quantitative
Research Question	#1) How do students feel, respond to and make meaning of their experiences when their grades are such that they are placed on an academic status other than Promote with Good Standing?	Focus Groups and Interviews <i>Students' responses allowed us to better understand their experiences and meaning-making when placed on an academic status other than Promote with Good Standing.</i>	Online Survey <i>The descriptive portion of the survey allowed us to understand how students rated their experience of being placed on an academic status other than Promote with Good Standing.</i>
	#2) How do different kinds of notification letters about failing to maintain good academic standing (standard vs. psychologically attuned) affect students' feelings, behaviours and academic outcomes?	Focus Groups and Interviews <i>Students' responses informed iterative letter development.</i> Online Survey <i>Students' open-ended responses allowed us to gather feedback for letter development.</i>	Online Survey <i>The experimental portion of the survey allowed us to understand students' perceptions of and responses to standard vs. attuned letters.</i> Administrative Data Analysis <i>Administrative data from the period before and after attuned letters were implemented were analyzed to determine if patterns were consistent with a benefit of the attuned letters.</i>

5.2 Online Student Survey

To examine our first research question about how students feel when they are placed on an academic status other than Promote with Good Standing, we conducted a survey in January 2018 of students at Mohawk College who had previously had this experience. In particular, we focused on students who received an academic status of Promote with Advice, Probation or Compulsory Withdrawal in fall 2016. It was decided to only sample students from the fall 2016 term to gather the experience of students who did not receive the psychologically attuned probation letter developed and implemented at the end of the winter 2017 term. Students in the fall 2016 term who were part-time were excluded, as depending on their program area, part-time enrolment can complicate the assignment of an academic standing and can result in an inconsistent application of the promotion policies. Lastly, only students in their first, second or third semester in the fall 2016 term were included to ensure they were still currently enrolled students by the time the survey was conducted.

The survey was conducted online. Students received an email invitation from a centralized student services contact (yoursuccess@mohawkcollege.ca), inviting them to participate in the survey. The full survey instrument is provided in [Appendix C](#).

In the survey, students were first asked to tell the story of their academic status in fall 2016. After describing their experience in an open-ended fashion, they were asked several scale questions about how they felt when they first found out about their academic status. For the present report, we centre our discussion on three question-set focal points: positive emotions, negative emotions and knowing anyone else. Specifically, students were asked the extent to which they felt positive emotions including determined, hopeful, calm and respected and negative emotions including ashamed, embarrassed, angry, guilty, sad, and scared (7-point scales, from 1=not at all to 7=extremely). Additionally, students were asked, “Think back to when you first learned you had been placed on an academic status of [Status Name] in fall 2016. At that time, did you know anyone else who had been on or was currently on [Status Name]?” For these questions, we were interested in whether students’ responses differed as a function of students’ own academic status at the time.

To address our second research question, after answering questions about their own prior experiences, students read either a standard letter or an attuned letter and reported how they would feel and think if they were to receive it. For the present report, we focus on three sets of outcomes: emotions (hopeful, ashamed, and badly about yourself), positive feelings (like advisors and professors would want to help you, supported by your school, and motivated in your classes at Mohawk College), and perceptions of the purpose of probation (to motivate students, to serve as a “wake-up call”, to warn students that they are not meeting academic expectations, to connect students with helpful resources, to identify students who can’t be successful, to punish students for not meeting academic expectations, and to let students know that staff/faculty are concerned and care about them). Consistent with the measures used in other studies of probation notification letters, students’ emotions and feelings were evaluated on 7-point scales (from 1=not at all to 7=extremely; Brady et al., forthcoming) while the perceptions of purposes were evaluated on 5-point scales (from 1=not at all to 5=very much; Brady, Walton & the College Transition Collaborative, forthcoming). Because the primary interest for these questions was the standard-attuned letter comparison, students’ own academic status was controlled for in analyses but no longer considered a factor of interest.

Finally, students answered questions about what they found helpful, unhelpful and confusing about the letter they read. For the purposes of this report, we do not discuss students’ feedback on the letters, but the feedback was used to refine the version of the attuned letter used in the interviews and focus groups, described next.

5.3 Interviews and Focus Groups

Beta-testing the psychologically attuned letters is an important part of the development process. The initial online student survey described above was the first means through which the research team beta-tested the letters. At the end of the survey, students saw the current version of the attuned letters and were prompted to detail their reactions to it.

We then reviewed students' responses and refined the letters based on their feedback. After we refined the letters in this way, we engaged in user testing by conducting several one-on-one interviews with students to better understand their reactions to the letters. Ten students who completed the online survey were identified as potential interviewees based on having provided detailed responses to the survey questions, suggesting they would likely be able to provide useful perspective on notification letters and the academic standing process more generally. These students were contacted to participate in interviews held in early February 2018. Interviews were roughly 45 minutes in length, and students were offered \$10 on their ONE Card (Mohawk's student card) to compensate them for their time and participation. In total, five students participated in the interview process, which broadly followed the following format (see [Appendix D](#) for the full interview protocol):

- Students described their own experience with receiving an academic status of Probation or Compulsory Withdrawal.
- Students provided feedback on Mohawk's standard notification letter for the academic status they received in fall 2016.
- Students provided feedback on the draft attuned notification letter for the academic status they received in fall 2016.
- Students identified which of the two letters they think Mohawk College should use to notify students of their academic status and justified their recommendation.

Further feedback on the draft attuned academic standing notification letters was then collected by facilitating three focus groups. All current full-time students at Mohawk College were eligible to participate in order to gain a wide variety of insights from students of diverse backgrounds. Each focus group focused on the notification letter for a different academic standing (i.e., Promote with Advice, Probation, Compulsory Withdrawal) and was comprised of 10 students, for a total of 30 participants. The focus groups were facilitated in mid-March 2017; each focus group was roughly 45 minutes in length, and students were offered a pizza lunch and \$10 on their ONE Card to compensate them for their participation. Focus groups were guided by a protocol that was based on the interview protocol but omitted the reflection on one's own past experiences and a review of the standard notification letter of academic standing. This protocol better accommodated the group, rather than one-on-one, format. (See [Appendix E](#) for the full focus group protocol.)

5.4 Analyses of Administrative Data

The third component of the study involved analyses of administrative data on students' academic standing at Mohawk College. We used descriptive and inferential statistics to better understand the return rates and subsequent term GPAs of students placed on different academic standings and how the attuned probation letter might be associated with improvements in those outcomes.

We will present descriptive statistics on students' subsequent term return rate and subsequent term GPA, using data that spans four years beginning in winter 2014 and ending in summer 2017.

- **Subsequent term return rate** refers to whether students either re-register or graduate in the term that immediately follows their placement on Promote with Advice, Probation or Compulsory Withdrawal. The data is broken down by student academic status and term.
- **Subsequent term GPA** refers to students' average GPA in the term *after* placement on Promote with Advice, Probation or Compulsory Withdrawal. This analysis includes only data from students who re-register in the subsequent term. Once again, the data is broken down by student academic status and term. Of note, all term GPAs of 0 have been removed based on the assumption that a term GPA of 0 indicates that the student withdrew from their program without following the appropriate withdrawal procedures.

Then, we present inferential analyses for students with an academic status of Probation to examine whether they are consistent with the attuned letter significantly improving students' academic outcomes. While the descriptive statistics span a slightly longer period, the inferential analyses focus specifically on two academic years: 2015–16 and 2016–17. Since the attuned letter was implemented fairly recently, any comparison including years that date further back than that would include sample sizes that are vastly different when comparing outcomes between students who received the attuned letter and those who did not. We focus on three analyses:

- First, a simple cross-tabulation explored if there was a statistically significant association between whether a student received the attuned letter or the previous letter and their likelihood to return for the subsequent term.
- Second, logistic regression models examined potential predictors of student return rates, including receipt of the attuned letter. For these analyses, the dependent variable was subsequent term return rate. Independent variables (explained in greater detail in the [Inferential Analysis](#) section) included demographic factors such as age, gender and first generation status; academic factors including term GPA and high school GPA; and an indicator to denote whether the student received the attuned letter or the previous letter.
- Finally, a Mann-Whitney U-Test examined whether there was a statistically significant difference between the average subsequent term GPA of students who received the attuned letter compared to the GPA of students who did not.

To allow for independence of observations in the data, only the first time a student received an academic status of Probation was analyzed; any subsequent times are omitted from analysis.

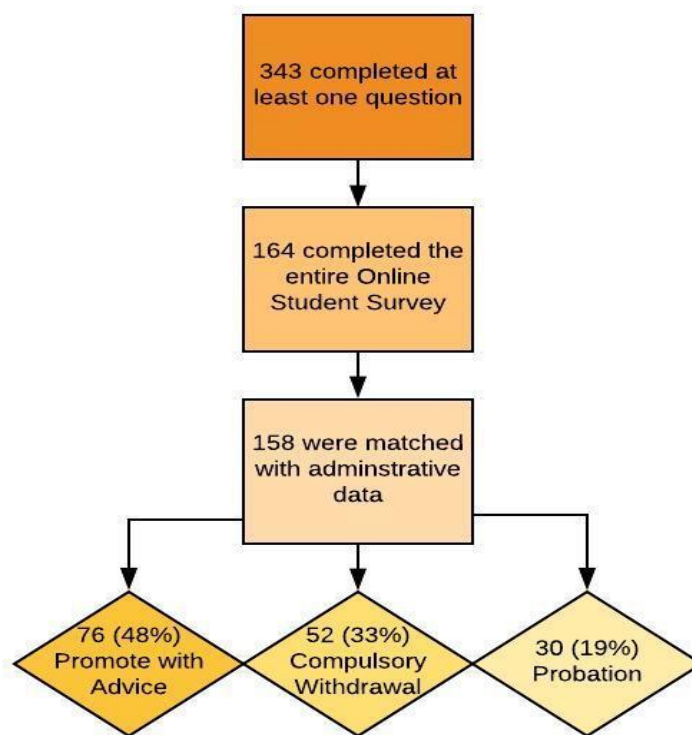
6. Results

This section describes key findings from each aspect of the research program.

6.1 Online Student Survey

In total, 343 students answered at least one question of the survey. Of these, 164 students completed the survey in its entirety (47.8%) and 158 could be matched to administrative records (46.1%). Almost half of the students (48%) had received an academic status of Promote with Advice in fall 2016, a third (33%) had received a status of Compulsory Withdrawal, and the remainder (19%) had received a status of Probation (See Figure 4). Students from all five of Mohawk's schools were represented: Engineering Technology (36%), Business, Media and Entertainment (26%), Community, Justice and Liberal Studies (21%), Health (13%) and Trades and Apprenticeship (4%).

Figure 3: Administrative Data for Participants in Online Student Survey



On average, survey participants were 23 years old. For most of them, Mohawk College was their first postsecondary experience, and they were enrolled full time in a diploma-granting program lasting either four or six semesters. In addition to school, participants worked for pay an average of 15 hours per week. Of those who provided demographic information, 52% were female and 46% were male. Just over a third of the

participants self-identified as having a disability. About a fifth (19%) were immigrants, a fifth (21%) identified as a person of colour, and 5% identified as Indigenous. Based on administrative data, 28% were first-generation college students.

6.1a Students' Experiences

In the survey, students were first asked to tell the story of their receipt of an academic status other than Promote with Good Standing in fall 2016. While some students wrote extremely brief answers such as "sickness" or "email," many wrote detailed responses. Table 4 provides a sampling of these more detailed stories.

Table 4: Illustrative Excerpts from Student Stories about Receiving an Academic Status of Promote with Advice, Probation, or Compulsory Withdrawal

...I was struggling financially and emotionally with some personal situations at home. I was also in a car accident which affected my ability to study and stay on top of school work. I found out via email what my status was. It was difficult for me to understand how I let that happen and I felt a sense of failure.
It was due to failed classes and although I did have resources available to me I don't think the school considers how degrading the probation status is really mentally. I felt shunned and frowned upon by the college due to the status although I did do fine in the coming semester it was still very mentally taxing.
What led me to have an academic status of Compulsory Withdrawal was a combination of an overload of school work, stress and mental health issues. I found out by the end of the semester that I had that status. I was disappointed in myself when I found out. I proceeded to feel down about it, and eventually dropped out due to lack of confidence. It was deterring for my future school academics, because I felt I couldn't do it.
It feels terrible. It was my second time going into Compulsory Withdrawal and it made me feel like school isn't for me. I don't know if I will be coming back sadly as it would just be another "donation" although I don't regret the time spent here at Mohawk. I met a lot of cool people and I wish I could stay but I can't sadly.
In one of my classes in the fall 2016 term there was a person who would bother me...which led me to not going to that class, and was a big part of me failing it. I also did poorly in my classes overall because I did not have any motivation to be in school and just chronically procrastinated. I found out that my academic status was probation by my Mohawk email. The email said to contact my student success adviser. So I emailed her, and made an appointment and she helped me a lot. She was very kind, helped me pick my classes for the next semester and ensured me that I could improve and still be successful in school. It was very stressful when I found out I was on probation and I felt very disappointed in myself, but with the help of my student success adviser I felt motivated to do better in school. And now I am grateful that it happened because I am doing a lot better in my studies and have found a purpose and goal for being in school.

In general, students' stories about being placed on a status other than 'Good Standing' included considerable negative affect. Across students, this negative affect related both to circumstances that led to placement on an unsatisfactory academic status and to how communications from the institution about their academic status made them feel. Students also discussed their efforts to make sense of what the academic status meant for them and for their future at Mohawk College. For example, one student wrote, "I was disappointed in myself when I found out. I proceeded to feel down about it, and eventually dropped out due to lack of confidence." Another said, "I felt very disappointed in myself, but with the help of my student

success adviser I felt motivated to do better in school. And now I am grateful that it happened because I am doing a lot better in my studies and have found a purpose and goal for being in school.”

Figure 4 illustrates students’ ratings of the positive emotions they felt, and Figure 5 illustrates students’ ratings of the negative emotions they felt when placed on a status other than Promote with Good Standing. For positive emotions, students rated ‘determined’ as the emotion they felt the most and ‘respected’ as the emotion they felt the least (of the options given). There was only one statistically significant difference by status: students with a status of Promote with Advice were more likely to report they felt calm than students with a status of Compulsory Withdrawal. For negative emotions, however, there were many statistically significant differences by academic status. For every negative emotion the survey asked about, students with a status of Promote with Advice reported feeling the emotion less than students with a status of Compulsory Withdrawal. Similarly, for every negative emotion except ‘anger’, students with a status of Promote with Advice reported feeling the emotion less than students with a status of Probation. There were no differences on any positive or negative emotions between students with a status of Probation and those with a status of Compulsory Withdrawal.

Figure 4: Students’ Reported Positive Emotions, by Academic Status

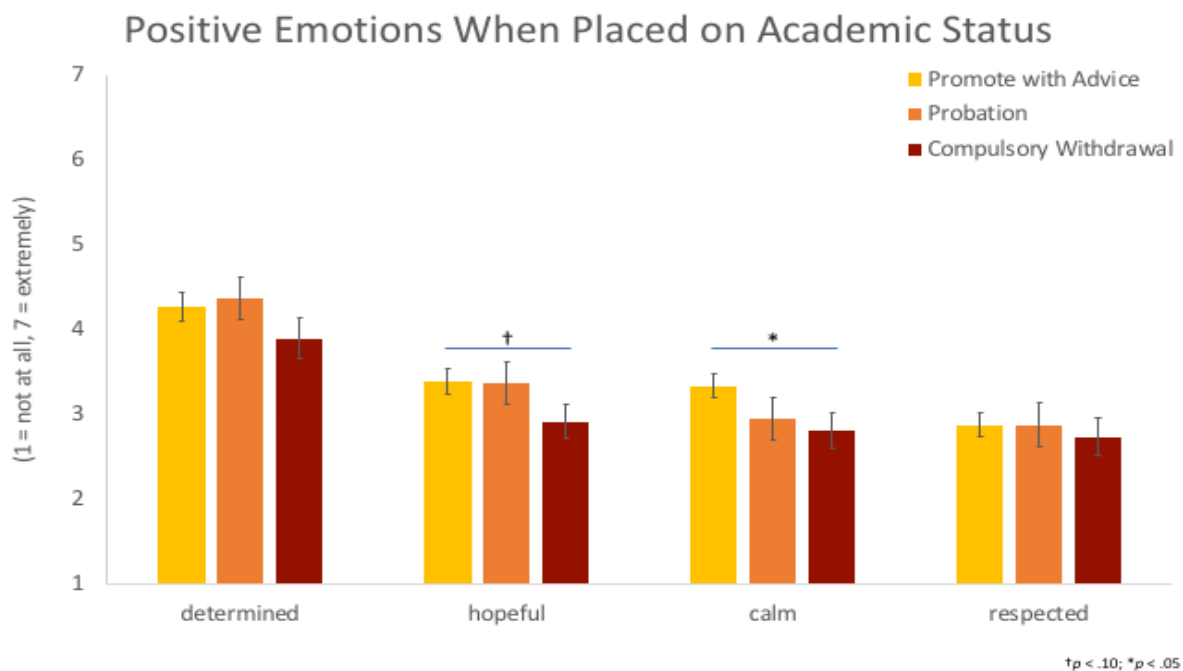
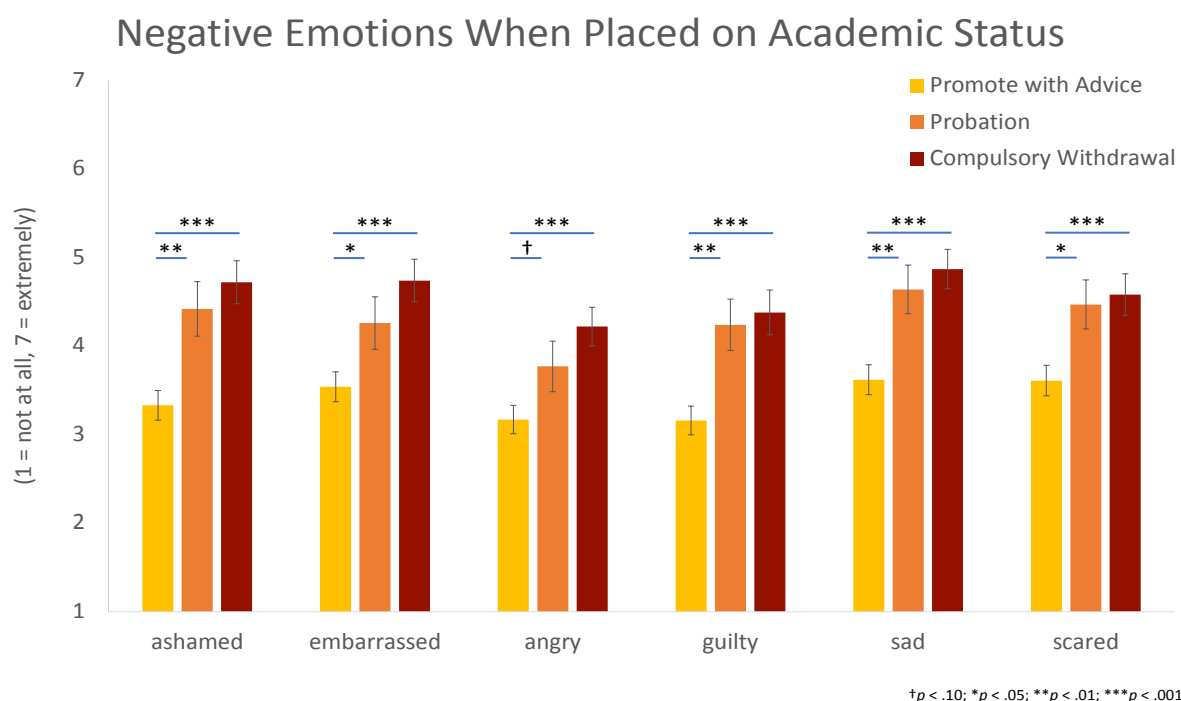


Figure 5: Students' Reported Negative Emotions, by Academic Status

In general, students with a status of Promote with Advice reported feeling positive and negative emotions to roughly the same extent. Contrastingly, students with a status of Probation or Compulsory Withdrawal reported feeling negative emotions to a greater extent than positive emotions.

Students with a status of Compulsory Withdrawal were least likely to report knowing someone else who had ever received their academic status when they themselves received it — only 36% did. In contrast, approximately half of students with a status of Probation (54%) or Promote with Advice (49%) reported knowing someone.

6.1b Students' Responses to Standard and Attuned Letters

As illustrated in Figure 6, students who read the attuned letter said they would be more hopeful than students who read the standard letter. There were no statistically significant differences by letter in students' ratings of how ashamed or badly students' would feel about themselves. Of note, students' ratings of all three anticipated emotions were quite low (a) objectively — below the midpoint of the scale when collapsing across condition; (b) compared to students' own recalled emotional responses to their placement on an academic status, at least for students who had been placed on Probation or Compulsory Withdrawal and (c) compared to similar ratings by students from other schools in past research.

As illustrated in Figure 7, students who read the attuned letter also said they would feel more supported by their school than students who read the standard letter. The effects for feeling like advisors and administrators would want to help and feeling motivated in classes were directionally consistent but not statistically significant.

Figure 6: Students' Anticipated Emotions after Reading a Standard or Attuned Academic Status Notification Letter

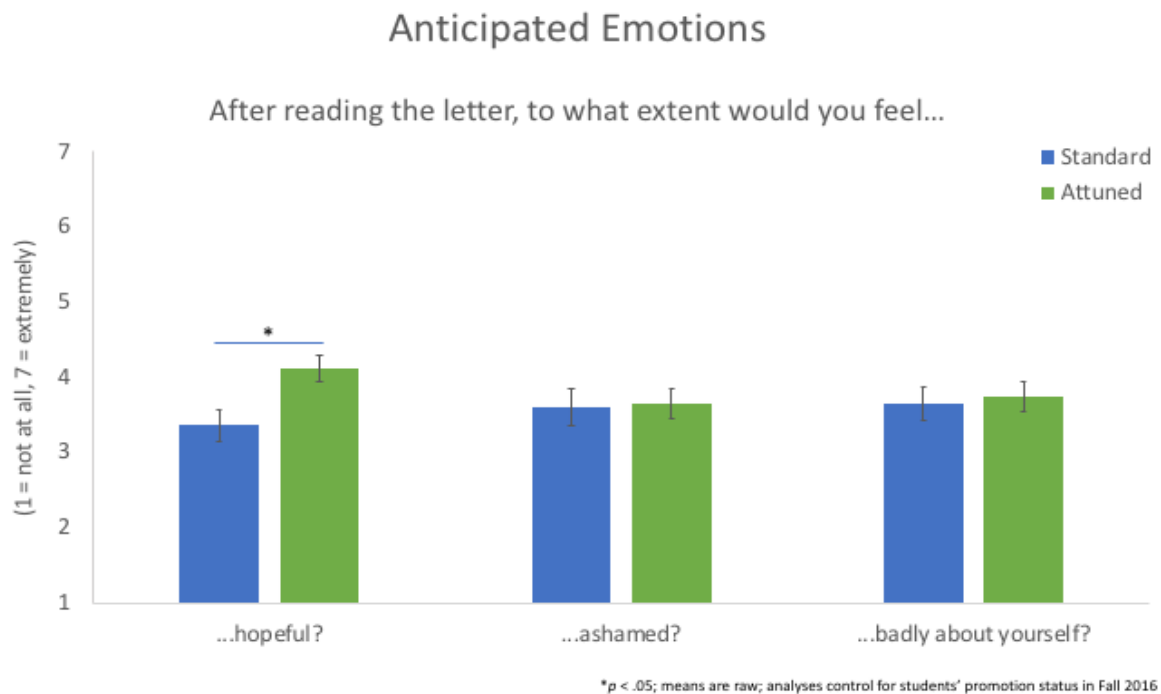
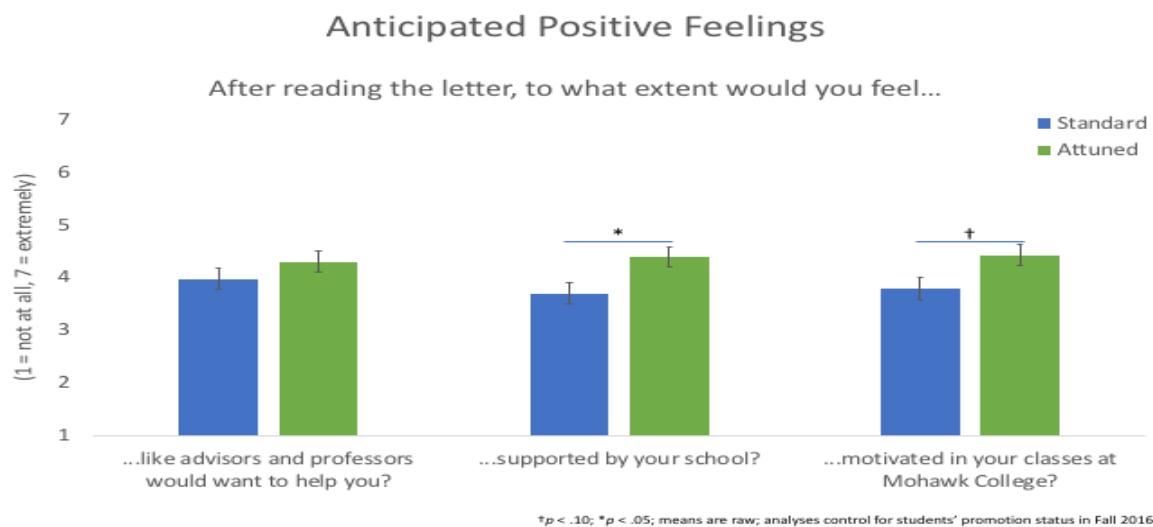
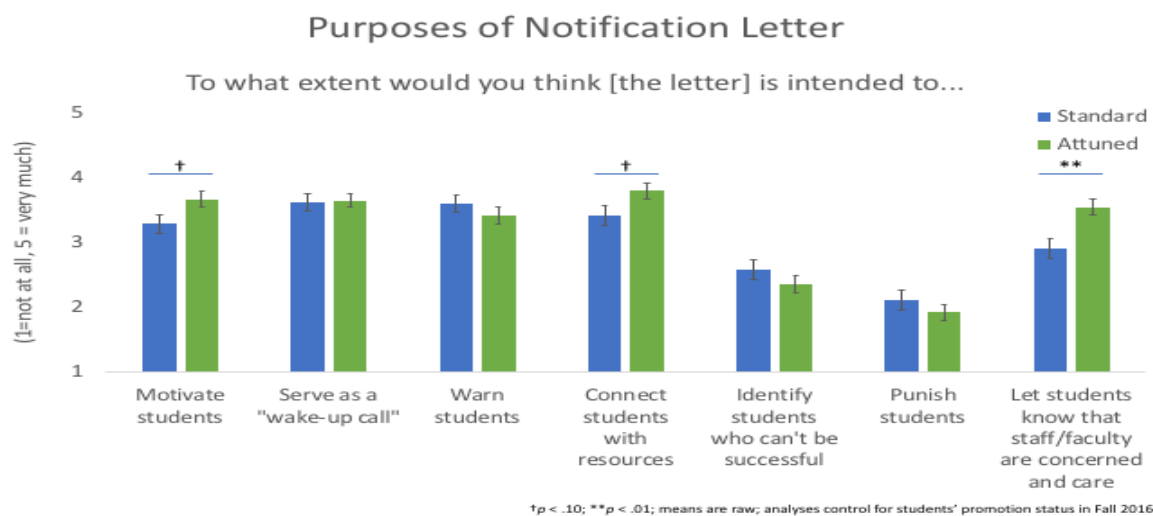


Figure 7: Students' Anticipated Positive Feelings after Reading a Standard or Attuned Academic Status Notification Letter



Finally, as illustrated in Figure 8, compared with students who read the standard letter, those who read the attuned letter said the letter was more intended to let students know that staff and faculty are concerned and care about them. Similarly, there were marginally significant differences such that students who read the attuned letter said it was more intended to motivate students and to connect students with helpful resources. There were no differences on the other purposes of the notification letter — including no differences on students' likelihood to see the letter as a warning or wake-up call.

Figure 8: Students' Perceptions of the Intended Purposes of Standard or Attuned Academic Status Notification Letters



6.1c Summary

Overall, students' responses indicated that the experience of not making good academic standing was quite negative, especially for students with statuses of Probation and Compulsory Withdrawal. Only a few differences emerged in students' evaluations of the standard and attuned letters. However, the differences that were observed indicated that students felt more hopeful and supported after reading the attuned letter. Ratings of how ashamed or badly about themselves students said they would feel did not have relevant changes in response to the attuned letters. This is interesting, given that previous research has primarily focused on the potential of attuned letters to reduce negative feelings, such as shame, rather than to boost positive feelings, though those effects have also been observed at times. What is of further note is that findings indicate that the students both feel differently themselves based on the letter they read and perceive differences in the intentions behind the letters. Despite the letter being attuned to students' psychological concerns, students did not see it as "soft."

As an aside, a few students spontaneously expressed appreciation to Mohawk College for conducting the survey. For example, one student seemed to take away a core message of the attuned letter, as illustrated in their comment: "After this I don't feel so alone at the school." Another was more direct in saying, "This survey is great. It's nice to know Mohawk wants to make this notice to the students as helpful and easy to read as possible."

6.2 Interviews and Focus Groups

Overwhelmingly, students in the interviews and focus groups responded positively to the attuned letters and preferred them over the standard letters used previously at Mohawk. In particular, students said they appreciated the paragraph of the letter that most directly acknowledged factors that contribute to academic difficulty and communicated that it is not uncommon for students to experience academic difficulties during college. Most students also said that they appreciated the student stories and described the stories as making them feel less isolated and more hopeful. Students pointed to the closing of each letter as positive and encouraging.

That said, students had recommendations for improving both the content of the attuned letters further and for improving student success services more broadly. Common themes in students' recommendations are outlined in Table 5.

Table 5: Themes from Student Interviews and Focus Groups

Common Content Themes	Common Student Services Themes
<ul style="list-style-type: none"> • First sentence is very important and can either encourage or discourage students from reading on. • Explain what the status means from a policy perspective. • Personalize information (grades, advisors and faculty) as much as possible. • Students “looking for themselves” in the stories. • Some students, particularly international studies, read some of the stories as excuses. 	<ul style="list-style-type: none"> • Desire for a midterm, early alert system. • Request to receive an official midterm grade from the college (rather than having to calculate their own). • It can be difficult to get appointments with advisors on the timeline that is most helpful for responding productively to placement on academic standing. • Follow up academic standing notifications with an in-person event.

Students’ content feedback led to several revisions to the attuned letters. First, the first paragraph of each letter was edited to include information about what the status meant from a policy perspective. The purpose of this was to clearly state the academic standards students did not meet that resulted in them being placed on a particular academic status (e.g., for Compulsory Withdrawal, the information was added that “students need a grade point average of at least 60% in order to be in good academic standing at Mohawk College”). To clarify further Mohawk College academic standing policies, a hyperlink was added to each of the attuned letters that took students directly to a [Mohawk College website](#) that provides an explanation of promotion statuses. Second, in the Probation and Compulsory Withdrawal letters, a sentence was included in the first paragraph that clearly stated the college’s positive purpose for the academic status; this sentence was bolded to make it stand out visually. Third, the stories were revised substantially: fewer stories were included, and the remaining stories were edited to be more general. The research team believed that these revisions would make the stories resonate with more students and increase the likelihood of students reading them.

The research team agreed that personalized information in the letters would be ideal but did not feel that this was a change that could be implemented immediately. The Mohawk Student Services team continues to take students’ recommendations for improving services under advisement.

6.3 Analyses of Administrative Data

Descriptive Analyses: What are Students’ Subsequent Term Return Rates by Academic Status?

Table 6 displays subsequent term return rates for Mohawk College students between winter 2014 and summer 2017, broken down by particular term (i.e., winter, summer). Due to the faculty strike that occurred during the fall 2017 semester and resultant changes in academic standing policy as well as significant deviations in enrolment and withdrawal patterns, fall semesters have been excluded from our current data analysis. As illustrated in the table, return rates for students with each academic status remained fairly consistent over the period analyzed.

Over the reporting period, summer (to fall) return rates are highest for all students in summer 2017 regardless of academic status. Students with an academic status of Probation or Compulsory Withdrawal that term would have received the attuned letter; as expected, we observe a corresponding uptick in the percentage returning for the next term. However, this uptick should be treated cautiously, since return rates are also higher for students with statuses of Promote with Good Standing or Promote with Advice (see Table 6, Panel B).

Table 6: Students' Subsequent Term Return Rate 2014–2017, by Academic Status and Winter (Panel A) or Summer (Panel B) Terms

Panel A: Return Rates of Students from Winter (Winter to Summer or Fall)				
	Winter 2014	Winter 2015	Winter 2016	Winter 2017*
Promote with Good Standing	62.4%	61.7%	62.3%	60.4%
Promote with Advice	76.1%	72.9%	78.5%	77.5%
Probation	70.3%	72.2%	72.0%	72.6%
Compulsory Withdrawal	39.2%	42.3%	39.5%	39.1%
Panel B: Return Rates of Students from Summer (Summer to Fall)				
	Summer 2014	Summer 2015	Summer 2016	Summer 2017*
Promote with Good Standing	79.6%	78.9%	81.8%	83.2%
Promote with Advice	82.1%	83.2%	82.8%	86.4%
Probation	75.8%	80.8%	79.9%	82.4%
Compulsory Withdrawal	42.3%	49.5%	46.5%	49.5%

* Denotes a term when students on probation received the attuned letter.

6.4 Descriptive Analyses: What are Students' Subsequent Term GPAs by Academic Status?

Among students with an academic status of Probation in the winter term (see Table 7, Panel A), those who entered the process in winter 2017 and received the attuned letter had an average subsequent term GPA that was 2.0 percentage points higher than those who entered the process in winter 2016 and received the previous letter. However, on average, students who entered the process in winter 2017 had slightly lower term GPAs than their counterparts from three years prior, in 2014.

Among students with an academic status of Probation in the summer term (see Table 7, Panel B), those who entered the process in summer 2017 and received the attuned letter had an average subsequent term GPA that was 6.5 percentage points higher than those who entered the process in summer 2016 and received the previous letter. This same pattern was evident when collapsing across three summer term cohorts prior to the implementation of the attuned letter: on average, students who entered the process in summer 2017 and received the attuned letter had a subsequent term GPA that was 3.8 percentage points higher than the subsequent term GPA of their counterparts from the three cohorts prior who received the previous letter.

Among students with an academic status of Compulsory Withdrawal in the winter term (see Table 7, Panel A), those who entered the process in winter 2017 and received the attuned letter had a subsequent term GPA that was 5.0 percentage points higher than those who entered the process in winter 2016 and received the previous letter. This same pattern was evident when collapsing across three winter term cohorts prior to the implementation of the attuned letter: on average, students who entered the process in winter 2017 and received the attuned letter had a subsequent term GPA that was 3.3 percentage points higher than the subsequent term GPA of their counterparts from the three cohorts prior who received the previous letter.

Among students with an academic status of Compulsory Withdrawal in the summer term (see Table 7, Panel B), those who entered the process in summer 2017 and received the attuned letter had a subsequent term GPA that was 4.7 percentage points higher than those who entered the process in summer 2016 and received the previous letter. This same pattern was evident when collapsing across three summer term cohorts prior to the implementation of the attuned letter: on average, students who entered the process in summer 2017 and received the attuned letter had a subsequent term GPA that was 4.2 percentage points higher than the subsequent term GPA of their counterparts from the three cohorts prior who received the previous letter.

While these patterns are encouraging, the data for students with academic statuses of Promote with Good Standing or Promote with Advice contextualizes them (see Table 7, Panels A and B). These students, who did *not* receive an attuned letter, *also* had higher subsequent term GPAs in winter 2017 and summer 2017 than their counterparts in the respective three cohorts prior, though the magnitude of these differences were mostly smaller than the differences observed for students with academic statuses of Probation or Compulsory Withdrawal. This may suggest a general increase in effective support for students concurrent with the implementation of the attuned letter.

Table 7: Students' Subsequent Term GPA 2014–2017, by Academic Status and Winter (Panel A) or Summer (Panel B) Term

Panel A: Average Term GPA in Subsequent Term, Winter (to Summer or Fall)				
	Winter 2014	Winter 2015	Winter 2016	Winter 2017*
Promote with Good Standing	75.2%	74.6%	75.8%	75.9%
Promote with Advice	58.9%	59.2%	60.4%	61.0%
Probation	58.9%	56.0%	56.2%	58.2%
Compulsory Withdrawal	46.6%	47.0%	44.2%	49.2%
Panel B: Average Term GPA in Subsequent Term, Summer (to Fall)				
	Summer 2014	Summer 2015	Summer 2016	Summer 2017*
Promote with Good Standing	75.3%	75.5%	75.4%	75.9%
Promote with Advice	59.4%	59.1%	57.7%	60.7%
Probation	58.0%	59.5%	54.7%	61.2%
Compulsory Withdrawal	46.0%	46.4%	45.5%	50.2%

*Denotes a term in which students with an academic status of Probation or Compulsory Withdrawal would have received an attuned letter

6.5 Inferential Analyses: Is Receiving the Attuned Probation Letter Associated with a Higher Likelihood of Returning for the Subsequent Term?

The cross-tabulation in Table 8 includes students who were enrolled in winter and summer terms in 2016 and 2017. The results indicate that when looking specifically at the winter and summer terms, there are marginal differences in re-registration rates between those who received the new psychologically attuned letters, and those who received the standard letters. Before the attuned letters were implemented, an average 73% of students with an academic status of Probation re-registered or graduated in the subsequent term. After the attuned letters were implemented, an average 74% of students with an academic status of Probation either re-registered or graduated in the subsequent term.

For the inferential analysis, the dependent variable was return rate, while the independent variable was whether the student received the attuned letter. To measure the correlation between the two variables, a Kendall's Tau-b score was calculated, which indicated no statistically significant correlation between receiving the newly attuned letter and re-registering or graduating in the immediately subsequent term.

Table 8: Cross-tabulation of Subsequent Term Return Rate and Receipt of Attuned Letter

		Received the Attuned Letter		
		No	Yes	Total
Re-registered or Graduated	No	27% (155)	26% (156)	27% (311)
	Yes	73% (419)	74% (440)	73% (859)
	Total	574	596	1,170

To explore this relationship further, a bivariate logistic regression model was computed. As illustrated in Table 9, and consistent with the results of the cross-tabulation, the model indicated that there was no statistically significant relationship between whether a student received the attuned letter and whether they re-registered or graduated in an immediately subsequent term.

Table 9: Bivariate Logistic Regression Predicting Subsequent Term Return Rate from Receipt of Attuned Letter, Overall and By Term

Independent Variable	Overall		Winter		Summer	
	β	Standard Error	β	Standard Error	β	Standard Error
New Letter	0.04	0.13	0.02	0.14	0.23	0.34
Constant	0.95		0.89		1.13	
Pseudo R ²	0.00		0.02		0.002	
X ²	0.10		0		0.47	
N	1170		939		231	

*p<.05, ***p<.001

Next, a series of bivariate logistic regression models — one each for winter and summer terms — were used to explore whether the possible relationship between these two variables differed based on when during the academic year a student first received an academic status of Probation. The results of the by-term analyses provide similar outcomes to the overall analyses presented above. When running the same logistic regression model based on the specific term in which a student would have received the letter, there is no statistically significant relationship between receipt of the new psychologically attuned letter, and re-registration or graduation in an immediately subsequent term.

Finally, in our effort to understand whether the attuned letter was associated with a higher likelihood of returning for the subsequent term, we conducted a multivariate analysis, which controlled for various student characteristics. In addition to the attuned letter indicator that was used as an independent variable in the previous analysis, a number of other indicators were included in the model. These variables included student academic characteristics such as semester (i.e., semester 1, semester 2, etc.), learner course hours, term GPA and high school GPA, as well as student demographic characteristics such as age, gender and first-generation status. Within this report, the characteristics of age, gender and first-generation status were selected to explore, as these were key indicators of student groups at risk of not completing postsecondary education in previous research conducted at Mohawk College. In the subsequent years of this study, we anticipate exploring additional characteristics such as racialization, disability and Indigenous status.

Table 10: Multivariate Logistic Regression Predicting Subsequent Term Return Rate from Receipt of Attuned Letter Controlling for Student Characteristics, Overall and By Term

Independent Variable	Overall		Winter		Summer	
	β	Standard Error	β	Standard Error	β	Standard Error
Attuned Probation Letter	-0.14	0.15	-0.21	0.16	0.37	0.43
Semester	-0.20**	0.07	-0.23***	0.07	0.48	0.37
First Generation	-0.23	0.16	-0.23	0.18	-0.32	0.45
Gender	0.35*	0.15	0.41**	0.16	0.39	0.48
Age (in term)	-0.02	0.02	-0.02	0.02	-0.04	0.04
Term GPA	0.03**	0.01	0.02	0.01	0.08**	0.03
Learner Total Course Hours	0.00	0.00	0.00	0.00	-0.01	0.00
High School Average	-0.02*	0.01	-0.02	0.01	-0.05	0.03

Independent Variable	Overall		Winter		Summer	
	β	Standard Error	β	Standard Error	β	Standard Error
Constant	1.76		1.84		0.68	
Pseudo R ²	0.03		0.03		0.09	
χ^2	33.17***		28.76***		14.90	
N	925		783		142	

*p<.05 **p<.01 ***p<.001

As illustrated in the leftmost results column of Table 10, whether or not a student received the attuned probation letter was not significantly associated with their return rate when collapsing across term and controlling for various student characteristics. This is in line with both the cross-tab and the bivariate regression that was explored in the earlier section. The predictors in this model that did show a statistically significant relationship with re-registration rates amongst students on probation are semester, term GPA, gender and high school average.

Once again, to examine the analysis in greater detail, the same regression model was run based on the term in which students first went on academic probation. Table 10 presents these results in the three columns on the right. Consistent with earlier analyses, when the data is split by term, receiving the attuned letter shows no statistically significant relationship with return rates when referring to students who would have received it in either winter or summer term.

6.6 Inferential Analyses: Is Receiving the Attuned Probation Letter Associated with a Higher Subsequent Term GPA?

The final analysis examined if there is a difference in subsequent term GPA for students who received the attuned letter and students who received previous versions of the letter. To do this, an analysis was carried out to determine if there is a statistically significant difference between the means of subsequent term GPAs of students who would have received the attuned letter, and students who would have received older versions of the letter.

For the purpose of this analysis, students with a subsequent term GPA of 0 were removed based on the assumption that these students likely withdrew from the program, without following the proper withdrawal procedures. Since subsequent term GPAs are not normally distributed, instead of a t-test to explore the difference in means, a Mann-Whitney Test was used.

Table 11 presents the average subsequent term GPA for students who returned in the subsequent term after first receiving an academic status of Probation.

Table 11: Average Term GPA in Subsequent Term

	Average (next term GPA)	Number of Observations
Received Previous Letter	54.6%	1254
Received Attuned Letter	60.4%	373

On first glance, there is a difference in subsequent term GPAs when comparing those who received the attuned letter, with those who received previous versions of the letter. The average subsequent term GPA for those who received the older letter is 54.6%, compared to 60.4% for those that returned after receiving the attuned letter. A Mann-Whitney test calculated a z-score of -5.38 (significant at $p < .001$), which suggests that there is a statistically significant difference in average subsequent term GPA when comparing those who received a previous letter, and those who received the attuned letter, with the average subsequent term GPA being higher amongst those who received the attuned letter.

6.7 Overall Conclusions from Analyses of Administrative Data

Due to a number of extenuating circumstances surrounding the college strike in the fall 2017 term (including the adjusted timing of the term and the corresponding policy changes), the analyses that were carried out only included students in the winter and summer terms of 2016 and 2017. Results suggest that, descriptively, students' likelihood to either re-register or graduate in the term that immediately follows receiving a letter (i.e., *return rate*) is no different among students who were sent an attuned letter than among students who were sent a previous (standard) version of the letter.

When analyzing the statistical significance of a possible relationship between receipt of the attuned letter and return rates, the results were very similar. The cross-tabulation and both the bivariate and multivariate logistic regression models indicated no statistically significant relationship between receiving the new psychologically attuned letter and re-registration or graduation in the immediately subsequent term.

Subsequent term GPAs are descriptively higher among students who were sent an attuned notification letter than among students who were sent a previous (standard) version of the letter. This is most evident amongst students with an academic status of Probation who would have received the letter in summer 2017, with the average subsequent term GPA being higher than it had ever been for students going on academic probation in the summer term. A Mann-Whitney test collapsing across all terms indicated that the difference in average subsequent term GPAs between students that received the new psychologically attuned letter and those that received previous versions of the letter is in fact statistically significant.

While the statistical models suggest a lack of relationship between re-registration and receipt of the new psychologically attuned letters, these results should be interpreted cautiously for a few reasons. First, due to extenuating circumstances in fall 2017, it is not yet possible to measure the potential impact of the new letters on students that received them in the fall term, so the analysis is missing an important period of time in the college calendar. Hopefully with more time, future analyses can be adjusted to include an analysis of

students that receive the letter in a fall term. Additionally, important outcomes such as ultimate receipt of a credential cannot yet be analyzed; despite the positive relationship between receipt of an attuned letter and subsequent term outcomes (specifically referring to subsequent term GPA of those students that re-registered), there is no guarantee of a positive relationship with these more distal outcomes.

Since the letters are still in the very early phases of implementation, the effects of these psychologically attuned academic standing notifications warrant additional attention over a longer period of time, both at Mohawk and at other colleges.

7. Discussion and Conclusion

Recent research has indicated that placement on probationary status decreases the likelihood of a student returning to good academic standing or even returning in subsequent semesters. One of many possible reasons cited for this includes how academic status is communicated by the institution and, subsequently, understood by student. It has also been shown that students who receive a status of Probation, and in the case of Mohawk College Compulsory Withdraw, experience feelings of shame and fear.

During phase one of our study, notable patterns were uncovered both in the way that students responded to being placed on an academic status other than Promote with Good Standing as well as their responses to psychologically attuned notification letters. These patterns helped us to address our first two research questions.

7.1 Summary and Findings

Our first research question asked:

- How do students feel, respond to and make meaning of their experience when their grades are such that they are placed on an academic status other than Promote with Good Standing in college?

Our findings suggest that student responses to being placed on academic probation are most commonly negative, with progressively more negative feelings for students in more severe academic statuses. Students placed on the academic statuses Probation and Compulsory Withdrawal were also less likely to report feeling calm when compared to students placed on the academic status Promote with Advice. Thus, students placed on a lower academic status, when compared to their peers placed on a higher academic status, are more likely to report stronger negative emotions and less likely to report positive emotions. What students seemed to appreciate most about the attuned letters is the recognition that sometimes factors out of their control contributed to their academic status.

Our second research question asks:

- How do different kinds of notification letters about failing to maintain good academic standing (standard versus psychologically attuned) affect students' feelings, behaviours and academic outcomes?

Table 12 summarizes the positive emotional responses the attuned letters received when compared to the standard notification letters. Overall, there was an increase in the positive emotions felt; however, there was no statistically significant reduction in the level of negative emotions felt by students reading psychologically attuned letters when compared to the standard letters.

Table 12 Students' reported increase in positive emotions with attuned letters

Student Feedback Reported Feeling	
Hopeful	✓ *
Supported	✓ *
Motivated	✓ ^
Connected with Resources	✓ ^
Cared About	✓ **

[^] $p < .10$; means are raw; analysis controlled for students' promotion status in Fall 2016

^{*} $p < .05$; means are raw; analysis controlled for students' promotion status in Fall 2016

^{**} $p < .01$; means are raw; analysis controlled for students' promotion status in Fall 2016

Psychologically attuning notification letters has a positive impact on student emotions. In reviewing the psychologically attuned letters, in spite of lingering negative feelings, students indicated the adjusted communication left them feeling more hopeful and more supported by their school. They felt that the intent of the attuned letter was to demonstrate concern on the part of the staff and faculty for their success. This is an important finding as it suggests the relationship between the student and the institution is perhaps less at risk.

Positive impacts of the attuned letters were also noted in student academic performance. While no statistically significant impact has been noted in re-registration rates, this very early evidence and its descriptive data shows potential for stronger impacts in the future. Furthermore, a statistically significant positive impact on GPA in the subsequent term has been noted for students' placed on academic status other than Promote with Good Standing who received the attuned notification letters when compared to their peers who received the standard notification letters. Although we cannot claim causal links between the revisions of the letter and the slight increase in students' subsequent semester GPA, these findings do

lend themselves to suggesting that how we communicate with students can impact their future performance in their studies.

7.2 Implications for Institutional Policy and Practice

It is important to note that feelings of shame, embarrassment, sadness and fear, which are commonly elicited through the academic standing notification process, can negatively impact students' future academic performance and relationship with the institution. By simply adjusting and reframing a critical message, we can easily and cost-effectively demonstrate support of a student's emotional and academic well-being. Psychologically attuned notification letters do just that; they help students feel connected to resources offered at the school and let students know that there are staff and faculty who care and are concerned about their academic success. Although our study examines just one piece of communication between administration and students, we have come to realize that framing these conversations in a psychologically attuned manner can have positive implications on student emotional response, leading to increased academic performance. In other words, how we communicate to students matters.

It is, therefore, in the best interests of the student and the institution to adjust communications so that students perceive their relationship with the institution to be intact. Adopting an iterative process that includes multiple points of student feedback is useful and promotes stronger, more *attuned* letters. It is also highly respectful of the student experience in and of itself. This process ensures that messaging is catered to the emotions and needs of the students in the local context. Of note is that students at Mohawk who participated in the online student survey expressed their appreciation to the college for conducting the survey as they felt it demonstrated the college's commitment to students' emotional and academic success.

Furthermore, the value of partnerships — between funders, researchers, communication professionals, practitioners and administrators — should not be missed. Improving student success is not about single interventions or silver bullets, but rather a campus-wide commitment, which necessitates the participation of everyone. This project is a great example of a way to get many people working to achieve the same goal and moving in the same direction.

From a practice perspective, it is important to share findings cross-institutionally and work toward increasing staff and faculty awareness of the negative effects of communication that does not consider the student first. When we wag our fingers at students, when we tell them what is best for them, we can create feelings of alienation and shame. Awareness of how the probation process can be received as punitive rather than its intended action of providing a wake-up call is integral to the success of these programs and processes.

Another practice institutions may want to consider is an early alert system in which both practitioners and students have an opportunity to intervene in advance of a student heading into probation. Although an early alert system was not studied in this research project, several students mentioned in both the interviews and the focus group conversations the importance of being warned of changes in academic status ahead of time to mitigate the shock and disappointment of receiving a status such as probation.

From a policy perspective, it is in the institution's best interests to develop safeguards against aggressive or institution-centred strategies and, instead, adopt practices and policies that are more student-centred in nature. Consideration of what each status is named and whether academic standings are intuitive to students is essential to the success of these programs. We have to be intentional in our approach to communicating where a student stands with the institution and we must be transparent about why a student has been placed on a particular status, the process to return to good standing and the resources and services that are in place to help them be successful.

7.3 Directions for Future Research

Past research (Brady et al., forthcoming) has consistently found that psychologically attuned letters reduce students' anticipated negative emotions when compared with standard letters; however, that was not the case here. At Mohawk, the attuned letter appeared to increase students' positive emotions while leaving their negative emotions unchanged. This may be because the standard letter at Mohawk *already* included very little language that students interpreted as insincere or condescending. In general, students in the experimental portion of the student survey anticipated relatively low shame regardless of whether they viewed the standard letter or the attuned letter — lower shame, in fact, than they *reported* feeling. This level of shame is both objectively low and low in comparison to samples collected at other schools (where the mean rating of shame when viewing standard letters has typically been around 5 on a 7-point scale, in comparison to the overall average of 3.62 here).

Still, students in the interviews and focus groups overwhelmingly preferred the attuned letter to Mohawk's standard letter, and the administrative analyses suggested that the attuned letter may have led to improved student academic outcomes. Taken together, the present evidence suggests that there was less of an impact to be had on reducing students' negative feelings through the mechanism of the letter because these feelings were already quite low but that an attuned letter — even in the absence of decreasing negative emotions — might be able to help students by making them feel more hopeful and more supported. Understanding variability in schools' standard letters and students' responses to different letters, both standard and attuned, is an important direction for future research.

Although the administrative data analyses are not causal, they are the first to suggest that the attuned letter may lead to increased academic performance. In past studies, academic effects have primarily been on retention. Therefore, we look forward to collecting additional administrative data in the next phase of the project in order to understand if the additional data continues to be consistent with a benefit of the attuned letter and, if so, on which outcomes.

The Colleges Ontario (2017) report written by Deloitte highlights that an estimated 35% of students enrolled at college are considered “non-traditional students at risk of not completing postsecondary education” (p. 1). In future phases of our study, we anticipate exploring data relating to additional at-risk student groups, such as students with disabilities, Indigenous students and racialized students. This data exploration will be in addition to the characteristics already explored during phase one of the project (i.e., age, gender, and first-generation status). Exploring such data could uncover that the effects of institutional messaging is more profound within these student groups. As the expectation for colleges to support their at-risk students

continues to grow, and the cost of supporting these students continues to increase (Colleges Ontario, 2017), research supporting the positive effects of psychologically attuned notification letters for these particular student groups could provide a low-cost, high-impact strategy.

7.4 Looking Ahead

Now that refinement for phase one of the project has concluded and the psychologically attuned notification letters are finalized, in phase two of our study, we will be testing these psychologically attuned notification letters with a wider student population. While phase one focused on surveying students who had previously been placed on an academic status other than Promote with Good Standing, phase two will recruit 300 Mohawk students from the general student population. As with the experimental tests conducted for phase one of the study, our experimental test for phase two will include comparing students' reactions after reading the standard notification letter to their reactions after reading the refined psychologically attuned notification letter. Students will be asked to imagine that they have had a difficult academic term and that they have been placed on an academic standing other than Promote with Good Standing. Students will be randomized to view either the standard letter or the psychologically attuned letter, and then asked how they would feel and respond.

Phase two of our study will also include a multi-institution student comparison test. In order to understand how these effects might vary at different kinds of schools — and thus, how effects may generalize across institutions — we will conduct this same study at two additional institutions. The universities involved in the study will be convenience-sampled from institutions where the project team has existing collaborations. Students will be recruited from the general population of students attending these institutions and will complete the study online. They will view the original Mohawk letter or the attuned letter developed for Mohawk and report how the letter would make them feel if they received it. This will efficiently give us information about the likelihood that the results we observe at Mohawk will generalize to other institutions. It is our hope that this future phase of our project will produce findings that make our research relevant to a wider audience and further contribute to the growing body of research on academic standing and the impacts of psychologically attuned notification letters.

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