



## UNIVERSITY OF SAINT KATHERINE

### *Staying the Course: Exploring the Role of Psychological Distress, Academic Disengagement, & Measures of Support in Student Retention*

#### INTRODUCTION AND PURPOSE OF THE STUDY

In response to national trends among American higher education institutions pointing to a rise in students' psychological and behavioral distress, the University of Saint Katherine has directed attention to its students emotional and behavioral wellbeing. Alarming, clinical field experts and practitioners continue to elevate institutions' awareness of the fact that the psychological wellbeing of today's college student population suffers from a range of threats at an unprecedented rate (Henriques, 2014). According to the National Alliance on Mental Health (NAMI), one in four college-age youth have a diagnosable mental illness (Gruttadaro & Crudo, 2012). Using national data from more than 137,000 college students at 184 baccalaureate institutions, findings from the Cooperative and Institutional Research Program (CIRP) suggest that nearly a quarter of incoming freshmen have at least one psychological disorder (Eagan, Stolzenberg, Aragon, Zimmerman, Whang-Sayson, & Rios-Aguilar, 2017). Among this group of students, over half indicated feeling frequently depressed, yet only about a third shared that there would be a good chance they would seek psychotherapy. This is particularly troubling due to the fact that students who

experience depression are significantly more likely to also suffer from anxiety than any other disability (Eagan, Stolzenberg, Aragon, Zimmerman, Whang-Sayson, & Rios-Aguilar, 2017). Recently, trend analyses looking at 50 years of college student data have connected students' drive to achieve, cumulative GPA, and mental health (Eagan et al., 2016). Findings noted that degree aspirations and motivations reached a 30-year high in 2015. At the same time, students' psychological wellbeing reached an all-time low. Results from the 2014 National Survey of College Counseling Centers (Gallagher, 2015) also suggest an unbridled increase in the number of students with severe psychological concerns. Shortly thereafter, information gathered from the 2016 Survey of Students by the American College Health Association noted that over half of college students report a growing sense of hopelessness<sup>i</sup>. Studies continue to point to a mental health crisis on higher education campuses, with many calling the phenomenon a public health crisis.

The poignant question remains: What causes students' psychological distress, and how can higher education institutions help? The majority of college and university students increasingly tend to feel overwhelmed by their responsibilities, and at least half of this group went on to

develop an anxiety disorder that led to significant academic challenges (Gruttadaro & Crudo, 2012). According to Dr. Gregg Henriques, a clinical psychologist and professor at James Madison University, reasons behind the crisis are connected to broader societal features. First, he argues that we live in an age of anxiety and depression, citing evidence produced by the Center for Disease Control and Prevention. Second, technology's rapid evolution has produced information overload and environmental mismatch (Henriques, 2014). The present technological evolution continues to cultivate contexts which have outpaced human evolution (i.e., extended periods of time requirements interfacing over technology while humans have evolved to be social animals within hunter-gatherer communities). Third, economic and financial pressures have created an ecology of massive inequality and wage stagnation, which pressures students to work longer hours and assume impressive amounts of debt to fund their academic pursuits (Henriques, 2014). The aforementioned factors have worked synergistically to produce circumstances of increasing academic pressure and poor handling of mental health issues on campus.

Despite the range of ecological factors that fuel the college student mental health crisis, the public continues to divest resources and various forms of capital necessary for institutions to respond comprehensively. At the same time, accountability measures of student affairs and services continue to climb, prompting

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institutions to creatively address threats to students’ psychological wellbeing when working within current financial constraints.

However, it behooves institutions to direct attention on the matter due to the fact that students with mental health concerns are significantly less likely to complete their degree program. Students who drop-out or stop-out are less likely to return to higher education and place themselves at risk for a host of additional psychosocial problems (McFarland & Wagner, 2015). In addition to reasons inherent in the operation of a social institution in pursuit of the public good, as resource allocations and other revenue sources continue to dwindle, colleges and universities are encouraged to attend to students’ psychological wellbeing for obvious existential purposes. The number of tuition-driven higher education institutions continues to climb (Carlson, 2014), which has elevated the importance of a robust enrollment management agenda.

Indeed, students’ departure decisions place significant economic burden on institutions (Perna, 2006) and transfer unintended societal consequences (Fall & Roberts, 2012). This has led to the present empirical undertaking by the Office of Institutional Research and Effectiveness at the University of Saint Katherine, which explores factors that contribute to departure decision-making processes. Specifically, this study attempts to answer the following research question:

Which factors contribute to USK students’ consideration of leaving the institution?

## METHODOLOGY

**INSTRUMENTATION.** A robust apparatus was internally designed to respond to the aforementioned line of inquiry. The survey instrument was comprised of 67 items. The questions ranged in depth and complexity, and requested information on the frequency of students' feelings, attitudes, and behaviors empirically connected to a variety of psychological phenomena. Additional items were built into the instrument to tap into rich cognitive features exclusive to students' psychological experience at USK. Measures of anxiety, depression, and general psychological wellbeing were derived and adapted from clinical assessment tools, such as the Generalized Anxiety Questionnaire – IV for adults, Generalized Anxiety Disorder 7, and Patient Health Questionnaire 4. The integrity of items from validated and widely-used clinical assessments was left intact and these questions were left unchanged to avoid disruption to key psychometric properties. Items designed by USK personnel were internally validated by content experts.

The apparatus was administered by specific USK personnel at pre-determined times intended to garnish students' focus and attention to the task, as well as to gather a large sample representative of the population of students. After students received informed consent, they were invited to share their honest opinions to be used by USK personnel for enhancing services and programming. All paper surveys were then screened and de-identified by the institution's Educational Effectiveness Coordinator. Said individual proceeded to construct and prepare a dataset for eventual analysis.

**SAMPLE CHARACTERISTICS.** The survey administration garnered a 70 percent response rate, falling within excellent range of threshold recommendations for such performances (Fincham, 2008). A sensitivity analysis was performed as a responsible, cautionary effort to check for any nonresponse bias and similar intervening effects. Among the set of post hoc strategies employed were statistical comparisons of respondents' key demographic characteristics with the population of enrolled students to identify possible differences between early and late respondents. This thorough inspection demonstrated an absence of nonresponse bias.

The total sample was 43% female and 57% male. The majority of respondents were white (43%), followed by Latino/a or Hispanic students (34%). The remainder of the sample was as follows: black or African American (11%), native Hawaiian or Pacific Islander (7%), American Indian (3%), and other, meaning race not identified (1%). The majority of respondents were straight/heterosexual (92%), with only two percent identifying as gay or lesbian, three percent as bisexual, and one as other or not specified. Most respondents noted having health insurance (93%) and parents who graduated from college (57%). Although not the majority, it is important to point out that USK instructs a sizable population of sexual and racial minorities.

**ANALYTIC STRATEGY.** As survey items were initially ordered strategically to prevent or temper item spillover effects and similar inherent response biases, variables were restructured within the dataset in preparation for analyses. Then, an item-by-item inspection was performed to determine if absent observations were

explained by randomness or if an underlying pattern explained missingness, as well as if assumptions of preferred testing procedures were met. As data are rarely missing completely at random (MCAR) in such investigations, inspection of a series of expected probability distribution estimations clearly demonstrated situations in which any missing observations across variables, which were very few, proceeding with the test procedure was entirely acceptable. Missing cases along the independent variables and the outcome were handled using the expectation-maximization (EM) procedure, which is a method that fully accounts for missing data using complete information, but without distorting results (Neal & Hinton, 1998). The EM procedure was used only when the final analytic model was theoretically and practically decided after the mining phase of the study.

**MODEL BUILDING PROCESS AND LATENT VARIABLE CONSTRUCTION.** In a stepwise fashion, variables underwent a scheduled one-by-one addition into a series of predictive models. This decided performance was a precautionary measure informed by the investigation's sample size, which greatly limited the inclusion of predictor variables into the linear regression. The final number of items was estimated by taking the product of the number of predictor variables and thirty ( $k*30$ ). In this study, only three predictor variables were permitted for inclusion into the final model. Note that any other results are discussed outside of the scope of the final predictive model, which may slightly increase the probability of an erroneous result, namely a Type-I or Type-II error.

In short, the process started by building an outcome measure in light of the

study's research questions. Four items were identified within the survey that were theoretically connected to institutional departure decision-making processes. An exploratory factor analysis was performed on the set of items and, following the principal components extraction, the resulting eigen values loaded heavily on a single latent construct. No rotation was necessary, as a result. The factor was labeled USK departure decisioning, due to the nature of the items which comprised the construct. Several other factors were created using an identical process to capture the following rich constructs: academic support, athletic support, psychological distress, and physical wellbeing. A measure of internal consistency using Cronbach's alpha revealed either 'good' or 'excellent' results for assessed constructs. Building these factors also served to maximize the integrity of the final regression equation, given the limited number of advised predictor variables due to sample size limitations and the need to capture the fullest possible amount of actionable information. The USK departure decisioning construct was utilized as the study's outcome measure, while the remaining latent constructs served as independent variables. All variables were simultaneously entered into the regression analysis and a standard confidence interval was used to determine significance.

## **RESULTS**

**PRIMARY FINDINGS IN RELATION TO THE RESEARCH QUESTION.** As a reminder to the reader, the first research question attempts to identify factors that contribute to students' thoughts to disenroll from the University of Saint Katherine. Exploring cognition that contributes to decision-making processes is an especially

worthwhile activity, as thought-patterns are behavioral antecedents. Therefore, analyses first revealed that the constructed statistical model was a powerful predictor of students' departure decisioning processes,  $F(1, 93) = 8.79, p < .05$ . In other words, variables comprising the model were good predictors of the study's outcome. Significant results emerged in relation to the academic support factor, while the athletic support construct did not meet statistical threshold requirements. The resulting negative association between students' perception of quality regarding USK's academic support and the extent to which they thought about leaving indicated that a 1-unit increase in the independent variable produced a 0.27 decrease in departure decisioning. At the same time, Saint Katherine students' perception of athletic support did not impact the degree to which their thoughts about leaving materialized.

However, in recent times, anecdotal evidence has suggested that some of the university's degree-seeking population might not take advantage of existing academic support opportunities, which shares obvious theoretical connection to this study and potentially explanatory value of relationships between variables. The result of including a statistical control for students' academic disengagement failed to offer evidence of mediation, as academic support perceptions again emerged significant. Simply put, academic support matters. This interesting corollary does not mean to discount the association between students' disengagement and the outcome. Further inspection of the output illustrated a statistically significant connection between the two phenomena,  $F(2, 93) = 3.60, p < .05$ . That is, academically disengaged

students at USK tend to think about leaving the institution more frequently than their counterparts ( $\beta = 0.19, p < .05$ ).

The final steps in the modeling process completed response to the study's research question by attempting to understand the effects of psychological distress on students' thinking to disenroll. As a stand-alone predictor, students' psychological health significantly predicted their thoughts about dropping out of their current degree program, but this significant relationship disappeared in the presence of the control variables. At the same time, controlling for students' psychological health over the course of the iterative regressions washed away the previously seen association between academic disengagement and the outcome. Analysis of a bivariate correlation matrix indicated that psychologically unwell students are significantly more likely to become academically disengaged, explaining why said relationships and their impact were eliminated. When looking beyond traditional confidence interval thresholds to enhance our understanding of the current phenomenon, evidence points to the fact that USK students who think less about disenrolling tend to also have lower levels of psychological distress, higher academic engagement, and stronger perceptions of academic support, although this does not mean to say that one causes the other. When the three constructs were brought together, however, academic support held the strongest impact, while additional predictive value of the remaining two variables receded.

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**PERIPHERAL FINDINGS.** While the central purpose of this research was to respond to the stated line of inquiry, tertiary analyses produced further useful information for USK personnel. In light of the result demonstrating both the statistical and practical significance of academic support structures, understanding factors associated with said support proved meaningful. These factors were explored in a similar fashion as outlined prior. Inspection of changes in the standardized regression coefficients upon successive introduction by variable block shed light on psychological distress. Indeed, USK students' mental wellbeing was closely connected to their perceptions and attitudes regarding available academic support structures,  $F(1, 93) = 17.83, p < .001$ . Students with presentations of psychological distress were significantly less likely to favorably experience academic support services and the like ( $\beta = 0.41, p < .001$ ).

This relationship persisted even after controlling for physical wellbeing, academic disengagement, and cognitive activity about disenrollment. It stands to reason that reducing students' psychological distress is prerequisite to shaping their experiences directed at academic support.

Indeed, students' mental health remains a crucial consideration, as established here. But, these data point out that psychological distress differentially impacts USK students, especially their perceptions of academic support and whether or not to remain at the university. A disaggregation of psychological distress by student-level characteristics uncovered that USK students with the

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poorest mental health were also more likely to work more than 10 hours per week, be the first in their family to graduate from college, not have health insurance, and graduate with more than \$20,000 in student loan debt. What is more, while no patterns or group differences emerged in distress by race or sexual orientation, results highlighted that racial minorities and LGBT students thought more frequently about leaving USK.

## DISCUSSION

At the present time, the University of Saint Katherine enjoys a positively trending enrollment. This research is helpful for reinforcing the trend, as a thick literature demonstrates that students with mental health concerns often disenroll from university (Anderson, Whipple, & Jimerson, 2002). Within the USK context, this study found that, collectively, students' academic

disengagement, psychological distress, and academic support structures were powerful predictors of disenrollment decision-making. Multivariate analyses revealed that the construct of students' academic support was the strongest predictor of their thoughts to depart USK, holding constant academic engagement and psychological distress. This result is situated nicely within the body of empirical work on the effects of academic support, which point to the far-reaching impact of academic support on student success (Campbell & Campbell, 1997; Freudenberg & Ruglis, 2007; Gleason & Dynarski, 2002).

More to the point, the remainder of investigated phenomena similarly connect

with previous work, namely the bodies of research suggesting that academic disengagement produces institutional departure decisions (Bodkin-Andrews, Denson, & Bansel, 2013; Iachini, Buettner, Anderson-Butcher, & Reno, 2002; Sahin, Arseven, & Kilic, 2016) and that high-quality academic support structures lead to significantly higher completion rates for colleges and universities (Alfaro, Umana-Taylor, Bamaca, 2006; Prebble, Hargraves, Leach, Naidoo, Suddaby, & Zepke, 2004). This research brief advances said empirical study by thorough analysis in the context of a small, liberal arts and sciences institutions with a special mission, as there are currently no peer-reviewed investigations situated in these environments. Therefore, several implications emerged for practical use.

**IMPLICATIONS FOR PRACTICE.** Not uncommonly, it is a shared misbelief that attending to phenomena to restructure and correct attitudes or behavior is too daunting a task. The higher education literature is saturated with use-cases and applications of academic and student-services enhancements in the area. In addition, certain postsecondary sectors (e.g., the California Community College System) are well-resourced for purposes of promising practices experimentation. Taking this into account, academicians and practitioners alike can do simple things, like asking students why they are in college, connecting students with services that meet their unique needs, maintaining high expectations and accountability standards, and showing

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students our pride at working at the University of Saint Katherine and that they, too, should be proud to be enrolled. In these costless ways, we can continue to evidence our caring for students’ lived experiences and where they take their future.

Building upon these approaches, USK is encouraged to consider several of its existing practices in pursuit of students’ academic support, psychological wellbeing, and overall success. First, it will be important for the university to streamline and standardize academic advising to ensure that all students receive the same high-quality advising. Second, USK might consider scaling its existing career-planning tools to elevate students’ awareness of such resources. Third, informational pieces might be distributed to students to promote the university’s contractual relationship with psychological services, namely with a doctoral-trained clinician. Of course, the presence of lucid awareness is a fundamental prerequisite to access. These abbreviated recommendations for practice may be further enhanced by a services assessment to identify potential threats or other challenges that might reduce the impact, design, implementation, or scalability of services.

**DIRECTIONS FOR FUTURE RESEARCH & LIMITATIONS OF THE PRESENT STUDY.** Future investigations are encouraged to consider a few new directions, which might also account for limitations of this study. First, it is important that the next research look more closely at

differences between perceptions of varying student support structures. As this research has identified differences between athletic and academic support features on the outcome measure, for instance, it is worthwhile to unpack perceptions further to derive relative effect estimates. Second, using longitudinal data, forthcoming work might look at the relationship between thoughts to depart and an actual departure decision. Third, planned studies should estimate the main effect of service use between students who took advantage of available services and those who did not. This might be accomplished through a quasi-experimental research design, utilizing propensity score matching or similar multivariate techniques.

The aforementioned quantitative approaches or study designs also serve to mitigate this study's limitations, specifically the disabled determination of causal relationships and issues inherent within accessing any available support services. Likewise, this quick inspection of the departure decision phenomenon suffered from sample size limitations, although tempered by limiting the number of analyzed independent variables in the final predictive model. Last, it is possible that insufficient demographic information was collected to ensure robust, practical significance. It was necessary to limit lines of questioning about certain student-level characteristics due to concerns about threats to validity caused by a social desirability bias or worries about confidentiality and anonymity. Nonetheless, the tradeoff of this decision to preserve the integrity of the data has potentially constrained the generalizability of this research.

Despite these challenges, evidence presented in this research brief should encourage USK practitioners, administrators, and faculty to think more boldly about improvement to ensure retention and enrollment management planning. Indeed, adequate response to documented psychological distress in higher education will require radical problem-solving, reduction in any dysfunctional institutional norms, and resource allocation reconsiderations to achieve unconventional interventions evidenced to enhance student achievement.

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