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Counselors in Academic Residence: A Program Evaluation Report for the CARE Program

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Counselors in Academic Residence: A Program Evaluation Report for the CARE Program

by

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Counselors in Academic Residence: A Program Evaluation Report for the CARE Program

by

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Undergraduate students in the United States experience alarmingly high rates of mental health disorders (Blanco et al., 2008). In response to this concerning trend, Colleges and universities are working to establish effective mental health programs (Eisenberg, Hunt, & Speer, 2012). As entering mental health counseling at or near the onset of a disorder is associated with better outcomes and lower life-time disease burden, such programs would benefit from taking an early intervention approach (Gore et al., 2011; Wang et al., 2005). The current study examined whether the Counselors in Academic Residence Program (CARE) can serve as an early intervention for college students' mental health. The CARE Program has also been considered a possible solution for early intervention with students from populations that tend to under-utilize traditional counseling services (e.g. male, Asian American/ Asian, Hispanic/Latino/a students) (Wong et al., 2014a). The present study includes a secondary data analysis of 2,147 intake records from students in two different mental health programs on a large public university's campus. Two years of student records from both the CARE Program and a traditional counseling center were analyzed. These records included presenting clinical

symptoms and socio-demographics factors. Results suggest the CARE Program captures students with less severe symptoms, which suggests an early intervention effect on student distress. Additionally, the CARE Program served proportionally more students from some of the targeted socio-demographic groups that traditionally underutilize counseling services. This report also offers a logic model of program transactions, inputs, constraints, and outputs for evaluators to consider.

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INTRODUCTION

College students in the United States have demonstrated a growing level of need for mental health services (de Girolamo et al., 2012; Drum et al., 2009; Zivin, et al., 2009). Scores on the commonly used MMPI reveal that since the 1940's American college students have experienced a 500% increase in their frequency of psychological disorders (Butcher, 2010; Twenge et al., 2010). Additionally, recent research by Gore et al. (2011) suggests that these concerning rates of psychological disorders constitute the leading cause of disease burden in the US for young adults. Furthermore, a longitudinal study of college student mental health found that at some point during their enrollment, roughly one-third of all undergraduate students surveyed qualified for a diagnosis of a serious mental health concern (Eisenberg et al., 2012). As roughly three-fourths of all lifetime mental health disorders in the US develop by the age of 24, colleges and universities' intervention efforts will be critical in addressing a large proportion of American's mental health (Kessler et al., 2007).

In response to this growing need for mental health treatment, colleges and universities are developing promising interventions to improve the mental health of their students. Overall, data suggest campus mental health centers are providing positive clinical outcomes for their clients. Roughly half of all students attending college counseling show clinically significant improvement while enrolled in school (Draper et al., 2002). Furthermore, Schwartz (2006) estimates that if college counseling centers did not exist, the students currently in counseling on their campuses would be at 18 times the risk of dying by suicide compared to the population of nonclinical students. As of now, students in counseling are only at 3 times the risk of dying by suicide compared to their nonclinical peers (Schwartz, 2006). Worryingly, Drum, et al. (2009),

found that 6% of students across 70 colleges and universities had seriously considered killing themselves in the past 12 months. It would seem that these counseling centers play an important role in keep students safe and health on campus, but that more needs to be done to help students in need.

Fortunately, university counseling centers seem to be capable of treating these severely distressed students. Wolgast et al. (2005) assert that significant improvement can be observed in clinically severe students in as little as 14 to 20 sessions. These authors assert that while counseling centers can treat severely distressed students, campuses would benefit from intervening with students before they experience such severe levels of distress.

Unfortunately, early intervention with students is challenging. Too often, help seeking for a mental health disorder is delayed (sometimes for as long as a decade) after the onset of symptoms (Wang et al., 2005). Research suggests that any delay in treatment is associated with worse life-long mental health outcomes (de Girolamo et al., 2012). Therefore, treating students closer to the onset of their disorders will not only limit their experiences of distress, but also the need for resource intensive treatment.

Garlow et al. (2008) suggest that the observed increasing trend of severe pathology on college campuses will require outreach efforts beyond simply providing counseling services on campuses. Garlow et al. suggest that screening, early intervention, and prevention efforts targeted towards young adults could help reduce the number of severely distressed students on college campuses. Additionally, such efforts to link students to services earlier in their pathogenic process may help mitigate the high impact and cost of lifetime mental health disorders. Institutions of higher education seem to offer a compelling platform for large-scale mental health interventions.

Despite ongoing outreach efforts, students in need do not seem to be accessing counseling. While counseling centers offering free or low cost counseling to students, very few take advantage of this resource in a timely manner. A large majority of students do not seek these vital mental health services at the onset of their disorders and many never see a mental health professional at all (Kessler et al., 2007). Recent research suggests that only 18% of college students with a diagnosable mental health concern seek help from a mental health professional (Eisenberg et al., 2012). It seems students are not reaching out for help when they need it and a number of researchers are trying to find solutions for this puzzling phenomenon.

The low rate of mental health service-utilization on college campuses is concerning. Fortunately, researchers and clinicians are working to find novel ways to help students with mental health disorders enter treatment earlier (Eisenberg et al., 2009). Eisenberg and colleagues have classified these early intervention efforts into three different strategies: i.) Stigma reduction and education campaigns, ii.) Screening and linkage programs and iii.) Mental health gatekeeping programs. The purpose of this paper will be to offer an evaluation of a mental health gatekeeping program at a large public university in the Southwestern United States. This report's primary goal is to offer a review and evaluation of the early intervention effect of the University of Texas at Austin's *Counselors in Academic Residence Program (CARE)*.

Gatekeeping Programs

Gatekeeping programs utilize non-mental health professionals in the community to create conduits for the general public to access mental health services. The critical elements of a gatekeeping program involve finding, recruiting, and training individuals in the community who can serve as “gatekeepers” (Bissonette, 1977b). Once trained, these gatekeepers can help

distressed community members by knowing the signs and symptoms of distress, sharing information about available resources, and promoting mental health help-seeking. Historically, sociologists considered bartenders, hairdressers, police officers, clergy, and secretaries as ideal candidates to be trained as gatekeepers (Bissonette, 1977a, 1979; Naftulin, Donnelly, & Wolkon, 1974). Professionals in these roles were thought to be well suited for gatekeeping as they were in regular contact with the public, were generally considered trustworthy, and had jobs that allowed for prolonged private or semi-private conversations with people in distress (Bissonette, 1977b). More recently, colleges and universities have taken up the gatekeeping model and now train residence hall advisors, professors, and staff as gatekeepers who can intervene with distressed students (Eisenberg et al., 2012).

Contemporary gatekeeping programs combine the strategies of stigma-reduction and screening and linkage campaigns described in Eisenberg et al., 2012. Unlike general screening and linkage surveys that rely on self-selection for screening, trained community gatekeepers can identify distressed students who might be reluctant to seek help by themselves, thus mitigating screening programs' self-selection problem.

The gatekeeping programs are also similar to the stigma reduction and education programs. As gatekeepers receive training to address mental health stigma, offer basic psychoeducation, and provide referrals for counseling to students in distress. Indeed, Wong et al. (2014) hypothesize that gatekeeping may be useful to overcome the barriers to help seeking associated with mental health stigma.

One strength of the gatekeeping approach is its underlying theory. The 20th century sociologist Bissonette (1977b) first described a theoretical model for the role of gatekeepers as “involving three principle functions: Case finding, referral, and ‘light counseling’” (p 32).

Bissonette posits that gatekeepers can be useful in overcoming three major barriers to mental health help seeking: Reluctance or inability to seek professional help, mental health stigma, and fear of making the problem worse by drawing attention to it. Bissonette suggests a number of criterion for who can serve as an effective gatekeeper. According to Bissonette, gatekeepers should have a role in the community that places them in regular contact with the target population. A gatekeeper's involvement with the community should include "private and protracted dialogue with strangers and casual acquaintances", (p. 32) as is the case with professors, advisors, and residence hall monitors. Additionally, the gatekeeper and the student should be of roughly equal class, which suggests that a high level of power disparity might limit a gatekeeper's ability to connect with a student. Finally, the gatekeeper and client should be socially firewalled from each other, which ensures that any disclosure will not have a negative impact on their external social life. These stipulations limit the number of people on a campus that can effectively serve as gatekeepers to students.

There have been several studies conducted on well-developed gatekeeper programs that meet Bissonette's criteria. One rigorous examination of gatekeeping programs involves three different studies conducted by Kitchener and Jorm (2006). Their research presents three separate studies on the Mental Health First Aid (MHFA) gatekeeping training program. The MHFA program is quite popular worldwide, having been implemented in Australia, the US, Scotland, Ireland, and Hong Kong. The program involves training gatekeepers to assess the risk of suicide or harm, to listen non-judgmentally, and to provide both information and emotional support to persons in need. The program also trains gatekeepers to encourage those in distress to seek help from mental health professionals and to encourage self-help behavior. These three studies included an uncontrolled observation of Australian community members in an urban setting, an

efficacy trial in a workplace context, and a randomized cluster effectiveness trial with members of a rural community.

This examination of MHFA demonstrates promising results that complement the research presented later in this article. The workplace efficacy trial (n=301) found promising results for gatekeepers' desire and ability to intervene with people in need of mental health support (Kitchener & Jorm, 2006). Compared to a waitlist control group, participants who were randomly selected to receive the MHFA training were more confident in their abilities to provide help to others and more likely to have advised others to seek professional help. These participants were also more likely to endorse attitudes that match the attitudes of mental health professionals about the effectiveness of mental health treatment. Furthermore, these participants demonstrated a decrease in stigmatizing attitudes and an accompanying positive increase in personal mental health scores on the Ware, (1999) Short Form Health Survey (SF-12).

As this efficacy trial was conducted under tightly-controlled experimental conditions, Kitchener and Jorm (2006) conducted their next study as a randomized cluster design in a more naturalistic setting with a number of rural Australian communities. In the effectiveness trial, clusters consisted of 16 local municipalities with half receiving the training immediately and half being waitlisted. This trial included 753 participants and found a significant treatment effect. Participants were better able to identify a mental health disorder in a vignette, revealed improved attitudes towards mental health treatment, and were more likely to have intervened with a person who was experiencing a mental health problem. Their study also observed an increase in gatekeepers' confidence to provide help and a decrease in social distance from people with a mental health disorder, which served as a proxy for mental health stigma.

While Kitchener and Jorm (2006) suggest compelling and rigorous support for the effectiveness of gatekeeping, some have noted a lack of scientific rigor. In a recent review of current gatekeeping literature, Lipson, (2014) found a dearth of quality research on the effects of gatekeeper training programs at colleges and universities. Of the 21 articles reviewed by Lipson et al. (2014), none included a randomized control trial on a college or university and only two of the six studies conducted at the university level had more than 100 participants.

Unfortunately, all available research on university mental health gatekeeping programs focuses on the gatekeepers and not the students (the ultimate beneficiaries of such programs). Lipson et al. (2014) report that the available literature focuses on the behavioral and attitudinal change of gatekeepers in relation to attitudes, knowledge, skills, behaviors, perceptions, and surface-level population outcomes. All of these outcomes, other than the population-level outcomes, investigate changes in gatekeepers after attending a training program. Only two of the 21 studies reviewed inspected any kind of population data and found either no increase or even a decrease in population-level help-seeking or mental health wellness as a result of a gatekeeping program (Freedenthal, 2010; Wyman et al., 2010). If the purpose of gatekeeping programs is to get more students into services, then the research on such programs need to study the individuals seeking care. The focus of the current study intends help fill this gap in the gatekeeping literature.

EVALUATING THE CARE PROGRAM

Counselors in Academic Residence

In the 2014-15 academic year, the University of Texas at Austin's Counseling and Mental Health Center (CMHC) implemented the Counselor-in-Academic-Residence (CARE) Program. This mental health gatekeeping program connects mental health professionals with academic advisors across several colleges within UT's main Austin campus. The CARE program was designed to connect students who were in distress and seeking academic advising to a mental health provider.

From nearly start of the 2014 Fall semester five of the colleges (Business, Communication, Engineering, Natural Sciences, and Undergraduate Studies) had counselors located within the academic advising space assigned to each of those colleges. In the College of Liberal Arts (COLA), the CARE counselor did not initially have a space to work with students within the college, but this was rectified after the first year. In a number of cases (including all COLA CARE students in the first year) students were referred by advisors to CMHC for appointments with their assigned CARE counselor. In some cases CARE counselors would meet with students in the CMHC location instead of their satellite offices due to scheduling conflicts or office-space renovations. As the goal of this evaluation is to compare CARE clients with CMHC client, it is important to determine if mental health symptoms or age differed by the location of a CARE counseling sessions. To this end, a series of independent T-tests were conducted. Students attending a CARE session at the CMHC demonstrated no statistical difference in the clinical severity of their symptoms but did differ statistically on age (see Table 1).

Table 1*Within CARE Program Comparison by Service Location*

	Service Location	N ¹	Mean	Std. Deviation	t	Sig. (2-Tailed)
Depression	CARE	431	1.7296	.52451	-1.126	p = .261
	CMHC	167	1.7839	.54003		
Anxiety	CARE	431	1.7077	.83010	-.835	p = .404
	CMHC	167	1.7717	.86926		
Academic	CARE	431	2.3259	.55414	-1.666	p = .096
	CMHC	167	2.4096	.54328		
Age	CARE	431	21.37	1.970	-6.007	p < .001
	CMHC	167	22.56	2.663		
Suicidal Ideation	CARE	429	.63	1.050	-.324	p = .746
	CMHC	167	.66	.998		

¹Note a 50-year-old student was removed from this sample due to being an outlier.

It seems that CARE counseling students who attended counseling at the CARE offices tended to be younger than those students in the CMHC. This finding suggests the effect of program on age difference may be influenced by the physical location of the counseling session and not just the gatekeeping effect found in the CARE program.

The Counselors in Academic Residence Program (CARE) was designed to reduce barriers for student mental health help seeking. The CARE Program attempts to achieve this by embedding counselors in academic affairs offices at the University of Texas at Austin. Academic advisors were trained as “gatekeepers” who can spot students in distress and refer them to their assigned CARE counselor. Ideally, by embedding a CARE counselor in the same building or office as the gatekeepers, students would be more likely to follow up on a counseling referral. By personally walking a student to a CARE counselor, the gatekeeper is able to bypass a number of barriers to student help seeking. These barriers include, reluctance to seek professional help, mental health and help seeking stigma, and fear of making the problem worse (Bissonette,

1977b). For additional details regarding the structure of the CARE program see appendix figures 1 through 5 for a logic model of the program implementation and transactions.

The gatekeeping approach is based on theoretical and practical suggestions first outlined by Bissonette, (1977b). Bissonette suggests that the first major barrier to help seeking gatekeeping programs can overcome is a client's "reluctance or inability... to enter the mental health care system through traditional doorways" (p. 32). The CARE Program attempts to address this barrier by having the gatekeeper serve as a supportive and motivating guide to the student to help navigate the complexities of entering mental health counseling. The CARE Program also addresses stigma, Bissonette's second barrier. Students seeking services may be worried about being spotted seeking help while checking-in at a counseling center's front desk or while waiting for their appointment in a counseling center's waiting room. By removing these physical structures and instead having students walk directly to the CARE counselor's office, gatekeepers are able to avoid further heightening a student's sense of perceived stigma and self-stigma. Fear of escalating a student's distress is the third barrier to help seeking Bissonette, (1977b) posits. The CARE Program addresses this by training gatekeepers to perform basic psychoeducation around the usefulness of talking about a problem with a counselor.

Hypotheses

The present study has two primary goals with related hypotheses. The first goal is to compare levels of distress between students who seek help from a traditional counseling center versus a decentralized mental health gatekeeping program. I hypothesize that students who seek counseling through the gatekeeping program will present with less clinically severe symptoms than students who seek help from a traditional counseling center. The rationale for this

hypothesis is as follows: Firstly, gatekeeping programs are designed to help distressed individuals enter treatment before their distress is sufficiently severe to motivate independent help seeking (Bissonette, 1977b). Secondly, as delaying treatment is associated with higher levels of distress, students in the gatekeeping program should seek help with less distress on average than students in the Counseling and Mental Health Center program (de Girolamo et al., 2012).

My second goal is to add to the college mental health gatekeeping literature by contributing a demographic comparison of students accessing mental health services through a gatekeeping program. I hypothesize that the decentralized gatekeeping program will serve proportionally more students from under-utilizing socio-demographic groups (e.g. male, Asian/Asian American, Hispanic/Latino/a, students) compared to students who seek care through the traditional counseling center. These specific sociodemographic student groups have been shown to hold higher levels of mental health and help seeking stigma and correspondingly lower rates of help seeking behavior (Kim et al., 2016; Wong et al., 2014b). As gatekeeping is thought to address the stigma barrier related to help seeking, I expect to see proportionally more of these students accessing mental health services through the CARE Program than the Counseling and Mental Health Center program.

METHODS

Participants

Records were collected from 2,147 undergraduate students enrolled in one of two counseling programs at a large public university's counseling center. The dataset was anonymized before being made available for this study and includes all 2,147 intake surveys and demographic questionnaires from the Fall 2014 to Spring 2016. Only students enrolled in either the traditional counseling center program (CMHC) ($n = 1548$) or the decentralized gatekeeping program (CARE) ($n = 599$) were included in the dataset.

Students in the CMHC program ranged in age from 18 to 52 years old with a mean age of 22.14 year ($SD 2.71$) years. Students enrolled in the CARE Program ranged in age from 19 to 50 with a mean age of 21.75 ($SD: 2.53$). To compare students' ages between these CMHC and CARE programs, an independent sample's T-test was conducted. It was found that students in the CMHC were significantly older than students in the CARE Program $t(2145) = 3.068, p < .01$. This difference amounted to .39 years or 4.68 months, which equates to more than a semester.

Overall, students who were seen for counseling in either program were predominantly juniors and seniors (see Table 2). While both programs demonstrated a trend towards having more upper classman, the CMHC program seems to be more imbalanced than the CARE program. To determine if these two groups were significantly different in the proportions of students' academic class (e.g. freshman, sophomore, etc.) a chi-squared analysis was conducted. The proportions of students in the CMHC program were more likely to be upper classmen than students in the CARE Program $\chi^2(1, N = 2,147) = 48.45, p < .01$. This trend of older and more advanced students in the CMHC program is relevant to the first hypothesis and will be considered further in the discussion section of this paper.

As the second goal of this research is to compare the race/ethnicity and gender composition between these two programs, a breakdown of these demographics can be found in the results section on tables 3).

Table 2
Demographic Comparison Between CARE and CMHC Programs

		Program Type	
		CARE	CMHC
Gender			
	Female	53.3%	62.0%
	Male	45.7%	38.0%
Race/Ethnicity			
	African-American / Black	5.2%	5.6%
	American Indian or Alaskan Native	0.0%	0.1%
	Asian American / Asian	20.4%	14.2%
	Hispanic / Latino/a	26.5%	24.5%
	Multi-racial	4.7%	7.4%
	Native Hawaiian or Pacific Islander	0.2%	0.3%
	Self-Identify	1.5%	1.5%
	White	39.4%	45.5%
	Other	2.2%	0.8%
Year in School			
	Freshman	4.0%	2.4%
	Sophomore	16.7%	10.6%
	Junior	24.5%	19.4%
	Senior	54.8%	67.6%

Procedure

Students in the CARE sample could make contact with a CARE counselor in one of two ways. Students who receive a referral for CARE are either walked in-person by the referring gatekeeper or given the number of the CARE counselor to call and set up an appointment for a

later time if the student or the CARE counselor cannot meet immediately. Students could also self-refer to the CARE counselors during a counselor's open office hours or by contacting the CARE counselor via voicemail. Whether or not a student is seen for counseling is left to the CARE counselor's discretion, and in the case where a student is not eligible or appropriate for CARE counseling, the counselor offers the student a referral to the appropriate community resources. If a student was eligible for the CARE program the counselor would schedule an intake session with the student.

Students seeking counseling from the CMHC program were able to access a CMHC counselor in one of two ways. The first option is for students to call the front desk to request an appointment with a counselor. Students can also walk in to the center and request to be seen for counseling or schedule an intake session in the future. Each student seeking counseling through the CMHC must first speak with a brief assessment counselor who spends up to 15 min with a student via phone or in-person to determine if the student is eligible and if the CMHC is the appropriate resource for the student's needs. In the cases where a student is not found to be eligible or that the student's needs are not appropriate for counseling the student is referred to the appropriate community resources. If the student is found to be appropriate for counseling, the brief assessment and referral counselor schedules an intake session with student.

Both the CMHC and the CARE programs have similar intake procedures. Students seeking mental health services from either program are required to complete a series of surveys iPads™ before their initial counseling session. These include The Counseling Center Assessment of Psychological Symptoms – 62 (CCAPS) by Locke et al., (2011) as well as a socio-demographic form, and an informed consent for treatment document on. All students seeking counseling from either program are told to arrive 15 minutes early before their intake session to

complete these forms. The intake process for each student is virtually identical except for the physical location. The CMHC program is situated in a counseling center while the CARE offices are located in academic affairs offices across campus. Students in CMHC complete their intake forms in a waiting room while CARE students complete their forms in a variety of semi-private mixed-use spaces outside of the CARE counseling room.

This dataset represents a census of undergraduate students seeking mental health counseling from these two programs. The de-identified data included records from all students' initial appointments in both the CMHC and the CARE programs. In the case of students who had records with both the CMHC and the CARE programs, only the earliest intake survey was considered (as indicated by the date and time on each record).

Missing Data

The electronic intake survey does not require students to complete every item on the CCAPS. However, very few students had missing data in CARE (5.67%) or CMHC (6.33%) on the measures reported in this paper. The median number of missing items was one item and no student missing more than four of the relevant CCAPS items. Subsequently, no students were excluded from the study on the basis of missing data, and the vast majority had complete documents. Missing data may also have resulted from some students being forced to complete the CCAPS and demographic items on paper forms when the computer system or tablets malfunctioned. These paper records were later transcribed into the electronic database. While the individual records completed on paper were not identified in this dataset, it is plausible that some of the missing data were the result of paper records transcription error or incomplete paper surveys.

Instruments

Counseling Center Assessment of Psychological Symptoms – 62

The Counseling Center Assessment of Psychological Symptoms - 62 by Locke et al., (2011) assesses a series of psychological symptoms commonly found in college counseling clients. Items are presented as statements, e.g. “I feel hopeless”. Clients rank their level of agreement with each statement on a 5-point Likert-type scale from 0 (*not at all like me*) to 4 (*extremely like me*). Eight subscales assess for common concerns in college counseling populations and include: Academic Distress, Alcohol Use, Anxiety, Depression, Eating Concerns, Family Distress, Hostility, and Social anxiety. These subscale are scored by averaging their respective items’ scores, and range from possible scores of 0 to 4, with 4 indicating a higher degree of student distress. The CCAPS also measures for suicidal thoughts in the past two weeks, but with a single item, “I have thoughts of ending my life”.

These subscales have shown good internal consistency, reliability, and convergent validity in both clinical and non-clinical populations (Locke et al., 2011). In a study of 499 non-clinical students taking the CCAPS-62, Locke et al., (2011) found the internal consistency coefficients were sufficiently strong with Chronbach’s α for the depression subscale = .913, the anxiety subscale α = .846, and the academic distress subscale α = .781 (Locke et al., 2011). The CCAPS-62 technical manual by the Center for Collegiate Mental Health (2012) reports good 2-week test-retest reliability with a sample of 175 clinical and non-clinical students. The test-retest reliability was strong for the depression ($r = .917$), anxiety($r = .842$), and moderate for the academic distress ($r = .759$) subscales. Locke et al., (2011) also tested for convergent validity between the CCAPS depression subscale with the Beck Depression Inventory, the anxiety subscale with the Beck Anxiety Inventory, and the academic distress subscale with the Academic

Adjustment subscale of the Student Adaptation to College Questionnaire. Results from that study found each subscale to be significantly related at the $p=.01$ level to their referent assessment with the correlation coefficients for scales on depression $r(494) = .721, p<.01$; anxiety $r(493) = .643, p<.01$, and academic anxiety $r(497) = -.680, p<.01$.

RESULTS

To compare student suicidal ideation (SI) across the two counseling programs, a Mann-Whitney U test was conducted. Responses from CCAPS item 46 “I have thoughts of ending my life” were scored on a Likert-type scale of 0- Not at all like me to 4 – “Extremely like me”. A significant relationship between program and endorsing suicidal ideation was observed. Students in the CARE program experienced less suicidality (Mdn = 0.0) than students in the CMHC program (Mdn = 0.0), $U = 403794.000$, $p < .001$. This result indicated that students in the CARE program reported significantly less severe suicidal ideation than students seeking services at the CMHC. Students were also proportionally less likely to experience any SI in the CARE group compared to CMHC (see Table 4).

Table 3

Prevalence of Suicidal Ideation by Program Type
($n=2142$)

Suicidal Ideation	Program Type	
	CARE	CMHC
Yes	35.51%	46.27%
No	64.49%	53.72%

Abbreviations: CARE, Decentralized Gatekeeping Program; CMHC, Counseling Center Program.

To evaluate differences in CCAPS subscale scores for anxiety, depression, and academic distress between CMHC and CARE students, an independent samples T-test was conducted. Students in the CMHC group were found to have scored significantly higher on the depressive subscale ($M = 1.86$, $SD = 0.52$) than students in CARE ($M = 1.74$, $SD = .53$), $t(2145) = 4.48$, $p < .001$. Students in CMHC were also found to have scored significantly higher on the anxiety subscale ($M = 1.87$, $SD = 0.84$) than students in CARE ($M = 1.73$, $SD = .84$), $t(2145) = 3.63$, $p < .001$. Finally, students in CMHC were not found to have scored significantly different on the

academic distress subscale ($M = 2.33$, $SD = 0.56$) than students in CARE ($M = 2.35$, $SD = .55$), $t(2145) = .67$, $p = .501$ (see Table 3). Good internal reliability was observed for each subscale, including Depression (13 items; $\alpha = .811$), Anxiety (9 items; $\alpha = .821$), and Academic Distress (5 items, $\alpha = .820$).

Table 4
Initial Symptom Severity by Program

	Cronbach's Alpha	Program Type	N	Mean	Std. Dev	T-Test Results
Anxiety***	9 items; $\alpha = .821$	CARE	599	1.7247	.84053	$t(2145) = 3.63$, $p < .001$
		CMHC	1548	1.8718	.84236	
Academic Distress	5 items, $\alpha = .820$	CARE	599	2.3493	.55149	$t(2145) = .67$, $p = .501$
		CMHC	1548	2.3313	.55975	
Depression***	13 items; $\alpha = .811$	CARE	599	1.7448	.52856	$t(2145) = 4.48$, $p < .001$
		CMHC	1548	1.8581	.52481	

*** = $p < .001$

While a statistically significant difference in sub-scale scores between programs is noteworthy, it does not speak to the extent these findings represent actual differences in a clinically significant manner. That is, to determine if students in CARE are less clinically severe than those in CMHC, further analysis is required. Fortunately, the CCAPS-62 instrument includes clinical cut-off scores for each subscale for both clinical and research purposes (Locke et al., 2011). These cut-off scores separate students' subscale scores into one of three categories: Low, Mid-range, and High levels of severity.

Odds ratios were conducted to compare the Mid-range and High levels of severity in depression, anxiety, and academic distress between the two programs. Students in CMHC were found to be 1.34 times more likely to fall above the High cut-off category on the depressive

subscale than students in the CARE, $OR = 1.34$, $p < .05$ 95% CI [1.09, 1.47]. Similarly, students in CMHC were found to be 1.46 times more likely to fall above the High cut-off category for anxiety than students in the CARE, $OR = 1.46$, $p < .05$ 95% CI [1.13, 1.88]. No statistically significant difference was observed in clinical cut-offs for the academic distress subscale between the two groups of students, $OR = 0.89$, $p = .24$ 95% CI [0.73, 1.08]. That students seeking counseling from CMHC score higher on average in depression and anxiety than students in CARE supports the first hypothesis that CARE students would be less distressed. Furthermore, the observed difference in these symptoms seems clinically relevant as well, as CARE students fall into less severe clinical categories compared to students who seek counseling through the CMHC.

The second aim of this study was to provide a demographic comparison between these two types of programs (see Table 2). To determine if proportionally more Asian/Asian American, Hispanic/Latino/a, African-American/Black, or Multi-racial students utilized CARE counseling than CMHC services, a series of chi-square analyses were performed. Note that due to insufficient sample size, these analyses were impossible for American Indian or Alaskan Native students or Native Hawaiian or Pacific Islander students. Additionally, due to the lack of specificity, the “Other” and “Self-Identify” categories were also excluded from analysis.

To compare the proportion of Asian American/Asian students by program type, a chi-squared analysis was conducted. The test yielded significant results, $X^2 (1, N = 2147) = 12.22$, $p < .001$, suggesting significantly higher proportion of Asian American/Asian students accessing counseling through the CARE program than the CMHC program. To compare the proportion of Multi-racial students by program type, a chi-squared analysis was conducted. The test yielded significant results, $X^2 (1, N = 2147) = 5.06$, $p < .05$, also suggesting significantly higher

proportion of Multi-racial students accessing counseling through the CARE program than the CMHC program.

To compare the proportion of African American/Black students by program type, a chi-squared analysis was conducted. These test failed to yield significant results, $X^2(1, N = 2147) = .165, p=.685$, suggesting there was no significant difference between the proportion of African American/Black students accessing counseling through the CARE program and the CMHC program. To compare the proportion of Hispanic/Latino/a students by program type, a chi-squared analysis was conducted. The test also failed to yield significant results, $X^2(1, N = 2147) = .916, p=.339$, suggesting there was no significant difference between the proportion of Hispanic/Latino/a students accessing counseling through the CARE program and the CMHC program.

These results suggested a mix of statistically significant and non-significant findings. First, a statistically significant relationship was found between counseling program and race/ethnicity for Asian American/Asian students ($p<.001$) as well as for Multi-racial students ($p<.05$) but not for African-American/Black students ($p = .685$) or Hispanic/Latino/a students ($p = .165$).

In addition to race and ethnicity, student gender was analyzed for inter-group differences. A descriptive analysis of gender distribution across the two programs seems to suggest that while male students made up less than half of clients in either group, the CARE Program had a more balanced distribution between male and female students (see Table 2). As less than 1% of students identified as transgender ($n = 6$), these students' records were not included due to the small sample size.

To compare gender within program type, a chi-squared analysis was conducted. The results yielded significant results, $\chi^2(1, N = 2140) = 13.24, p < .0001$. These results suggest that a significantly higher proportion of male students accessed counseling through the CARE program than the CMHC program.

DISCUSSION

The present study had two primary goals with related hypotheses. The first goal was to compare levels of distress between students who sought help from a traditional counseling center versus a decentralized mental health gatekeeping program. The second goal was to add to the college mental health gatekeeping literature by contributing a demographic comparison of students accessing mental health services through a gatekeeping program.

The first hypothesis that students in the CARE Program would report less severe mental health distress due to the early intervention effect of the CARE Program was supported. Students in CARE reported less severe indicators of depression, anxiety, and suicidal ideation than students who sought mental health counseling from a traditional counseling center. These results support the first hypothesis. Surprisingly, this trend towards less severe distress in CARE students was not observed for academic distress. The fact that the decentralized gatekeeping program was located in academic affairs resource centers around campus may suggest one possible explanation for this observed lack of disparity. It is noteworthy that the current study's levels of academic distress may be higher than the national average. The Locke et al., (2012) CCAPS technical manual reports that in a national sample of 59,404 students reported a mean academic distress score (Mean= 1.58, SD =.93), that was significantly lower than the current study's (Mean =2.34, SD = .84) $t(61549) = 37.32, p <.0001$. It seems the students in the current study are significantly more academically distressed than the national average.

Interestingly, in Krumrei, Newton, and Kim's (2010) study of 3,844 students in counseling, the majority of students who reported academic distress did not list academic distress as one of the reason they sought counseling. In fact, 87% of the students in that same study reported that the problems they *were* seeking help for had contributed to their high levels of

academic distress. It seems that academic distress is not a primary reason students seek help (Krumrei, Newton, & Kim, 2010). If academic distress does not predict help-seeking, but is a by-product of the disorders for which student seek help, it may explain the lack of disparity between the CARE and CMHC programs. Alternatively, this lack of disparity in academic distress may be informed by the CARE Program's reliance on academic advisors for gatekeeping referrals. If students encounter gatekeepers when seeking academic advising to address their academic concerns, it makes sense that students referred by these gatekeepers would be elevated on the academic distress sub-scale.

That students in the CARE Program were younger and less academically advanced than those seen at the Counseling Center further strengthens my first hypothesis. The CARE Program's efforts to reach students earlier in their pathogenic process may explain the observed differences in students' age and academic year between the two groups. This finding lends support to the ability of CARE to serve as an early intervention.

The over-all skewedness of students' ages and academic years towards being older and more advanced is striking as well. Curiously, this disproportionality in age is observed in other similar single-university studies. In a large study of 5,472 students at a different large public university's counseling center, Kim et al. (2016) observed a similar trend in older, more advanced students seeking services. Yet large and nationally representative samples suggest that students seek services in more equal proportions by age and academic year than are observed in this study (Draper et al., 2002; Locke et al., 2011). Whether this sample's skewedness is nationally representative or not, these data suggest the CARE Program serves more students earlier in their academic careers than does the CMHC program.

Research demonstrates the importance of entering treatment sooner after the onset of a mental health concern. In a study of a national sample of 5,692 adults living with persistent mental illness, Wang et al., (2005) concluded that it is critical for people to make immediate contact with a treatment provider after the initial onset of a disorder. Considering that the onset of life-time mental health disorders occurs before the age of 24, it is likely that students will have had experienced their initial onset of a disorder before they graduate (Kessler et al., 2007). Therefore it is encouraging that the CARE Program was able to reach a younger, less severe, and more diverse population of students as research shows that those who access counseling earlier tend to have better clinical outcomes with fewer secondary conditions (de Girolamo et al., 2012). Despite the lack of difference between these two groups on academic distress, the significant differences in depression, anxiety, and suicidal ideation lends strong support for my first hypothesis that the early intervention CARE program will see less severe symptomology in students seeking counseling.

My second hypothesis that a gatekeeping program could help lower barriers for accessing mental health counseling for students in traditionally under-utilizing populations was tentatively supported, but only for some of the theorized populations. Proportionally more male, Asian/Asian American, and Multi-racial students sought counseling through the gatekeeping program than the traditional counseling center. Interestingly, Wang et al., (2005) found that being male and from an ethnic/racial minority group were among the primary factors related to delay in treatment after the initial onset of a mental health disorder. The common masculine norm of stoicism has been linked to an increase in mental health self-stigma among men suffering depression (Seidler et al., 2016). As self-stigma negatively predicts mental health help seeking, it is not surprising that fewer men seek help for a mental health disorder (Eisenberg et

al., 2009; Tucker et al., 2013). Furthermore, the finding that proportionally more male students access counseling through the CARE program may be due, in-part, to the stigma-reducing effects of mental health gatekeeping programs.

These observed group differences lend support to the idea that the CARE program is more effective at reaching these populations earlier. It is noteworthy that these findings support the Wong et al. (2014a) hypothesis that gatekeeping programs are more effective at promoting higher levels of help seeking in Male and Asian-American/Asian students than traditional counseling centers due to their ability to navigate these groups' higher levels of stigma. As the importance of early intervention in mental health disorders has been demonstrated, the present findings are encouraging (de Girolamo et al., 2012; Kessler et al., 2007; Wang et al., 2005). This study lends support to the theory that gatekeeping can serve as an early intervention model for community mental health (Bissonette, 1977b; Eisenberg et al., 2009; Wong et al., 2014a).

STRENGTHS, LIMITATIONS, AND FUTURE RESEARCH

To the author's knowledge, this is the first study of its kind to investigate the presenting clinical concerns of students seeking counseling through a mental health gatekeeping program (Eisenberg et al., 2009; Tucker et al., 2013). The study also has several strengths. These include, the large number of observations over two years and that the dataset represents a campus census of undergraduate students seeking general counseling across two programs.

Limitations

Further exploration is needed to determine the CARE's utility in lowering barriers for mental health help seeking with certain populations on college campuses. It is unclear whether the CARE's higher proportion of students from certain socio-demographic groups was due to the program's gatekeeping efforts or to some other variable. It is possible that the higher proportions of male, Asian American/Asian, and Multi-racial students in CARE were the result of gatekeepers and counselors being physically located closer to groups of students with higher proportions of these demographic groups. This limitation prevents us from drawing conclusions about the mechanism behind reaching more students from traditionally underserved groups. Despite these limitations, these results are promising as they indicate that the CARE Program's intention of reaching more students from underserved socio-demographic groups was partially fulfilled, albeit only with male, Asian American/Asian, and Multi-racial students.

One additional unexplored factor that may contribute to these findings may be the distribution of CARE counselors in the various academic resource centers. More specifically, these counselors may be situated in academic centers serving student populations that have larger proportions of the target socio-demographic groups (e.g. targeting engineering schools to reach

more male students). This may confound the effect of having a gatekeeping program by situating counselors in locations closer to students. Unfortunately, to determine the effect of the physical location of CARE counselors on help-seeking in students from certain socio-demographic groups is beyond the scope of this exploratory data analysis. Furthermore, as this is an exploratory analysis, I cannot conclude that the observed differences in clinical severity or demographic distributions are due to the qualities of the decentralized gatekeeping program or due to unmeasured confounding variables.

There are also limitations around the available measures in this study. The demographic analyses are somewhat limited due to the lack of specificity to race and ethnicity. For example, the “Asian-American/Asian” ethnicity label encompasses a large and diverse group of students. Kim et al. (2016) have suggested that such over-arching labels are insufficiently precise, and ignore important differences among the various populations that fall under each demographic cluster. Future studies may benefit from more specific race/ethnicity identifiers.

Using the CCAPS-62 measure imposes limitations on this study as well. The CCAPS-62 was designed for early screening and detection of psychological symptoms and not as a formal diagnostic assessment tool. The CCAPS-62 provides clinicians with a way of flagging concerning symptoms to explore further in their clinical assessment of a client, but fails to provide the clear and decisive clinical diagnostics that a trained clinician and intensive assessment battery could conduct in a clinical randomized control trial.

While the CCAPS does not represent a formal psychological assessment tool, it is normed from a series of formal assessments and provides a good estimate of students’ presenting concerns (Locke et al., 2011). The CCAPS-62 demonstrates good sensitivity and specificity as demonstrated by the Receiver Operating Characteristic (ROC) analysis found in (Locke et al.,

2011). Furthermore, the CCAPS-62 survey instrument has been shown to more closely match clinician's impressions of client's presenting concerns and clinical severity than other common counseling center assessment tools (MacFarlane, et al., 2015). Finally, while these data were not collected with the intention of being used for academic research, the CCAPS-62 has been shown to be appropriate for conducting a secondary data analysis and has been used in multiple college mental health research studies (Locke et al., 2011; MacFarlane et al., 2015; Youn et al., 2015). Therefore, while there exist some limitations for the CCAPS-62 use in research, it does offer a sufficiently valid approximation of the psychopathology of students seeking counseling.

While significant differences in clinical severity exist between the CARE and CMHC programs, the constraints of a secondary data analysis will require further study to determine the efficacy of gatekeeping in student mental health. Additionally, as this dataset is a cross-sectional study of each students' intake session, I cannot draw any conclusions about the differences between students' clinical outcomes in each program. Furthermore, as this study represents a single college campus, my conclusions may not be generalizable to other communities and campuses.

Unfortunately, no data was collected about the onset or course of students' mental health concerns. Such data would be valuable to test the conclusions of de Girolamo et al.'s (2012) study, which asserts that early intervention at the onset of a disorder is associated with better long-term mental health outcomes,. Therefore, without age of onset data, I cannot claim that the CARE Program intervenes with students earlier in their pathogenic process. This is despite the fact that CARE Program students were younger, academically less advanced, and less distressed than students in the CMHC program. Finally, this study is further limited by the lack of measurable mental health and help-seeking stigma data. As Bissonette's (1977b) mental health

gatekeeping theory hinges on mental health stigma, future research interested in help seeking programs' efficacy should include student mental health stigma.

Future Research

These notable limitations suggest the need for further research. Future research may benefit from measuring the onset of students' psychological disorders. Wang et al., (2005) suggest that the average person in the US waits between 6 to 8 years to seek treatment for mood disorders and 9 to 23 years for anxiety disorder. Such a large gap between onset and treatment creates worse outcomes and increases the risk for the development of secondary psychological disorders (de Girolamo et al., 2012). Measuring the onset of a disorder would allow researchers to determine the amount of time students delay help seeking. Such data would be helpful for determining if gatekeeping programs can reduce the delay between onset and help seeking and improve students' clinical outcomes. A longitudinal study of students in a counseling after receiving a gatekeeping referral would allow for further exploration of the clinical outcomes after gatekeeping. Such a study might include students' age of symptoms onset, initial severity of symptoms at the time of treatment, and clinical outcomes at termination.

Future studies inspecting socio-demographic differences would do well to use more precise descriptive labels for race and ethnicity as is suggested by (Kim et al., 2016). Such data could be paired with mental health and help seeking stigma data to determine if gatekeeping is more of an appropriate intervention with certain socio-demographic groups than others.

Additional research may benefit from describing the reasons some students choose to not follow up on a gatekeeping referral. To the author's knowledge, rates of successful and unsuccessful referrals have gone unmeasured in gatekeeping research. Additionally,

understanding the reasons students do not follow up with a referral may help improve referral rates if they. A qualitative study of student experiences seeking help after encountering a gatekeeper may shed some light on this process and future directions for improvement. This would allow for further exploration of the barriers to student mental health help seeking.

In summation, the CARE Program offers compelling, albeit preliminary, evidence of an early intervention effect on students who seek mental health counseling after being exposed to a gatekeeper. Moving forward, gatekeeping research would benefit from studies with an emphasis on measuring students' mental health and help-seeking stigma, the use of more precise and inclusive socio-demographic items, and longitudinal clinical outcome data.

APPENDIX

Program Logic Model

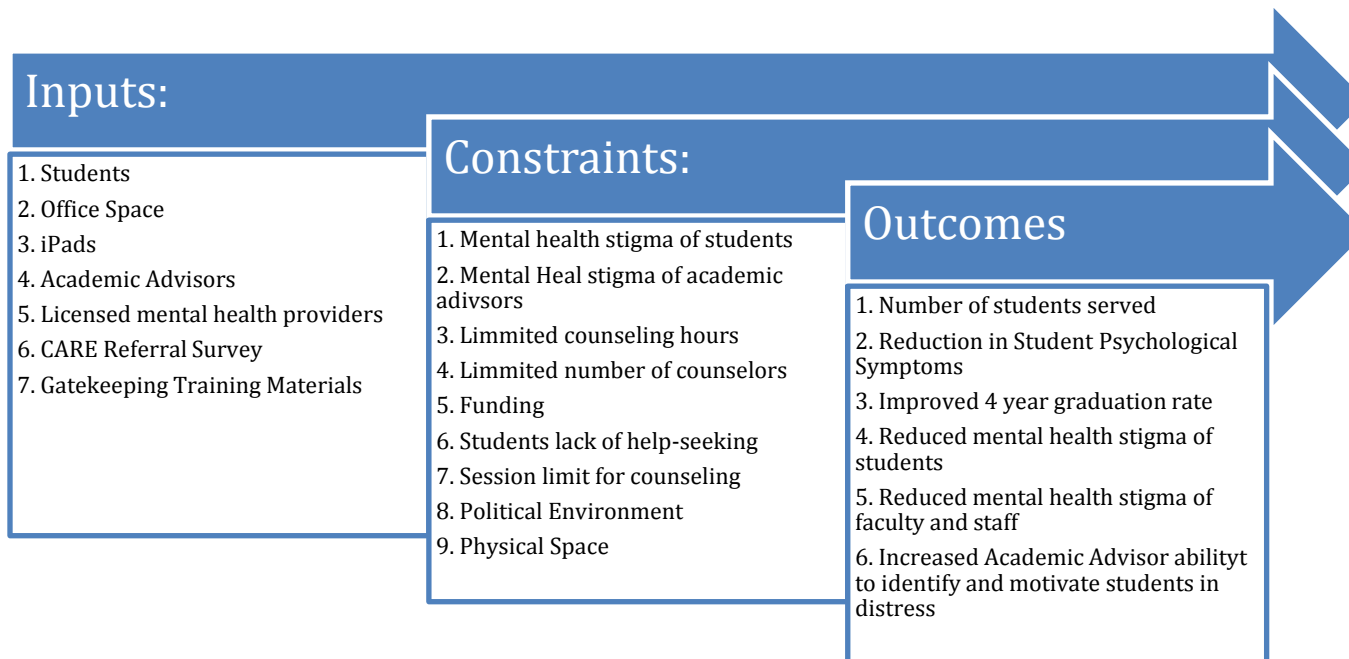


Figure 1: First Level Transactions

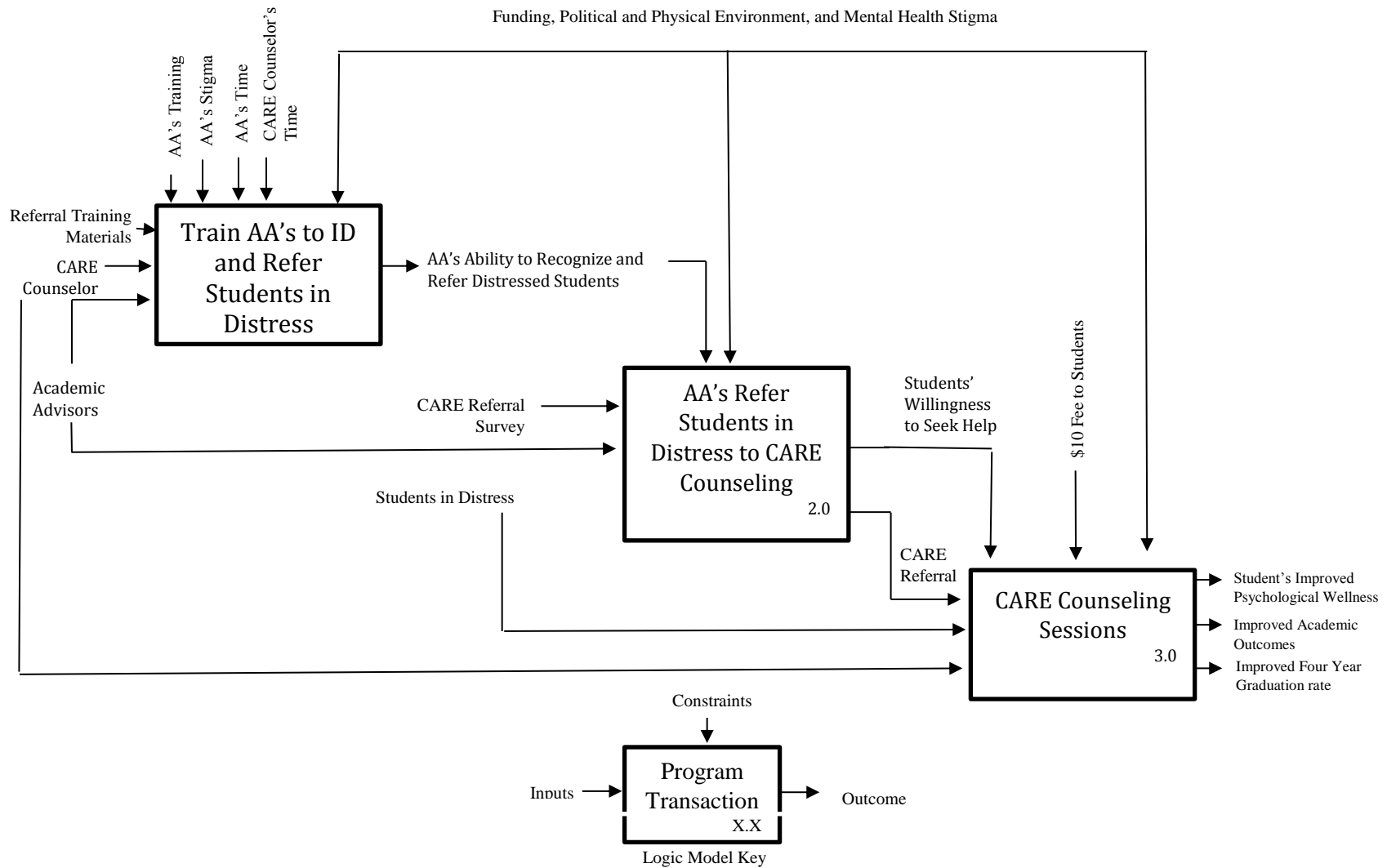


Figure 2: Second Level: Major Program Transactions

Third Level: Breaking down transaction 1.0 above: Train AA's to ID and Refer Students in Distress

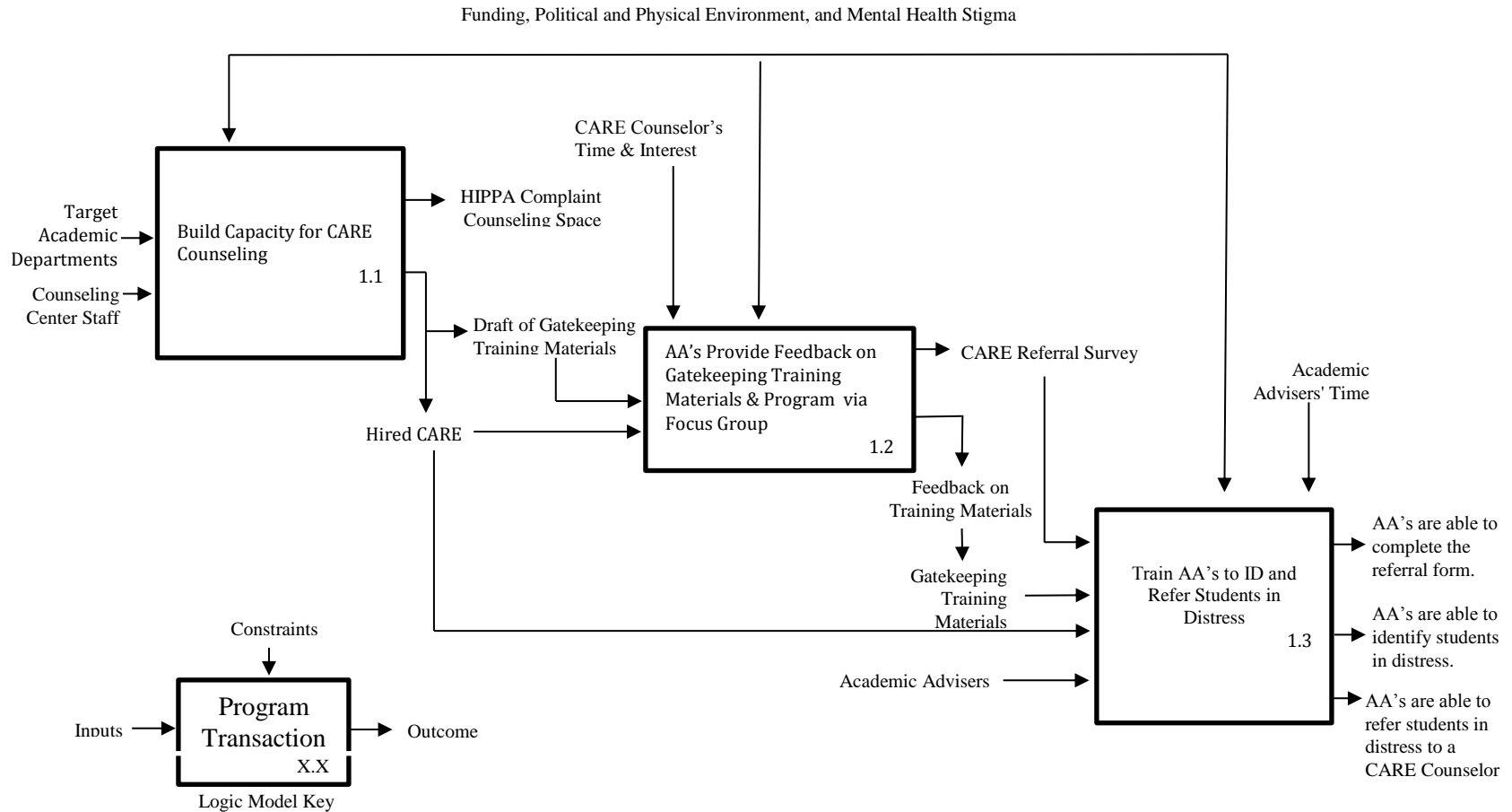


Figure 3: Third Level: First Transaction: Training Academic Advisors

Third Level: Breaking down transaction 2.0 above: Academic Advisor Provides CARE Referral

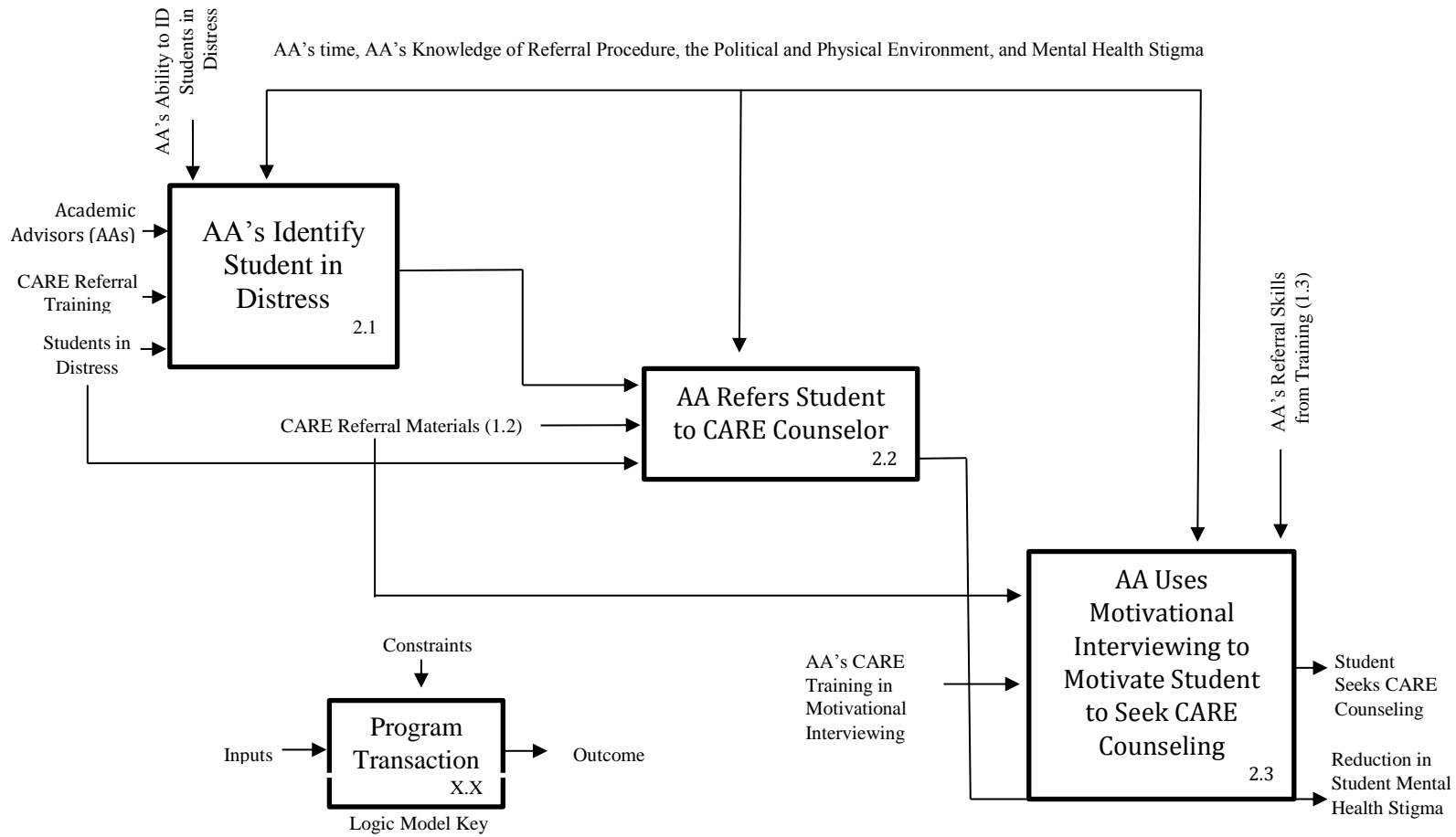


Figure 4: Third Level: Second Transaction: Referring Students to Counseling

Third Level: Breaking down transaction 3.0 above: CARE Counseling Sessions

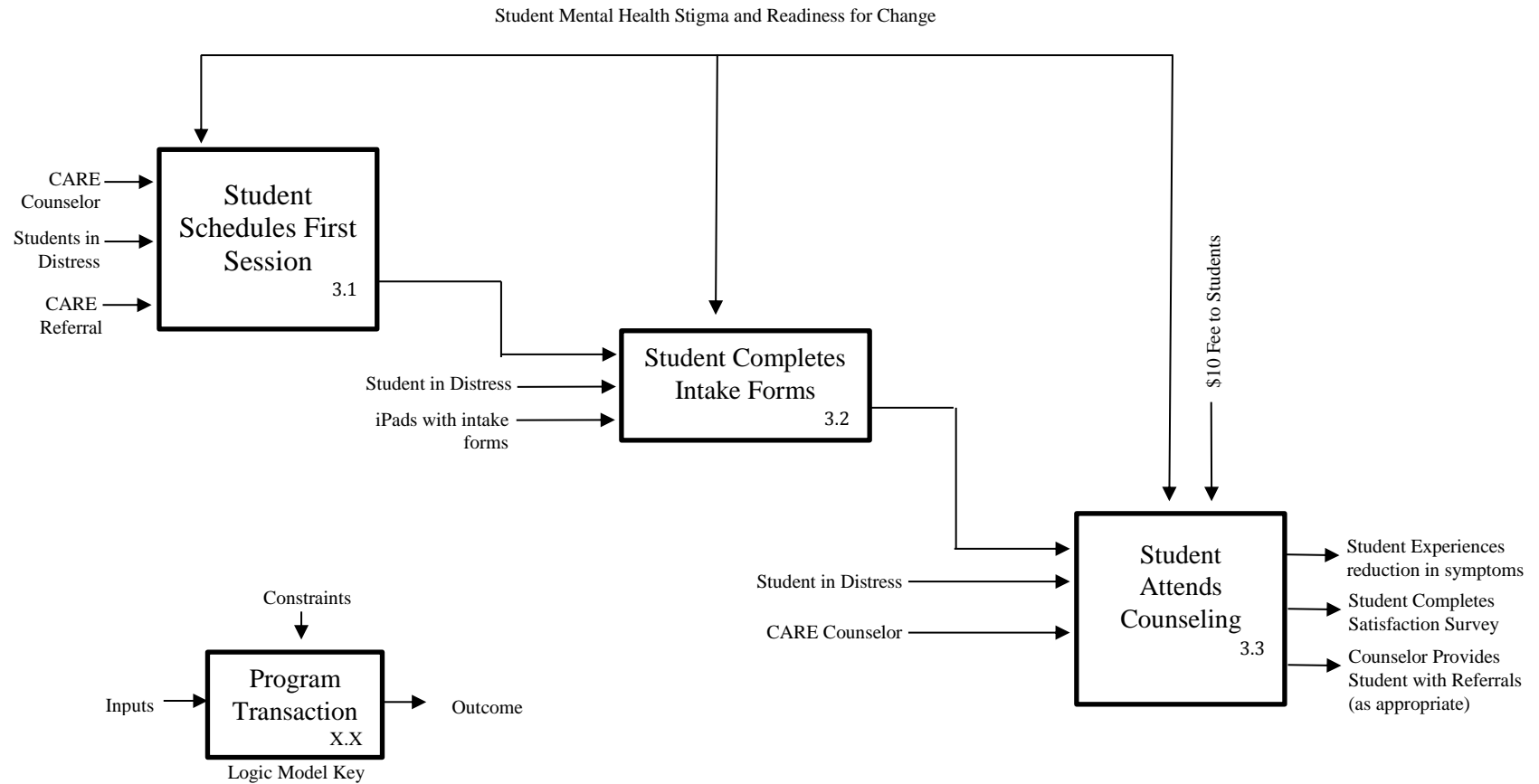


Figure 5: Third Level: Third Transaction: CARE Counseling Sessions

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