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## Personal Counselling at an Ontario Community College: Client Groups, Service Usage, and Retention Counseling personnel pratiqué dans un collège communautaire de l'Ontario : Groupes de clients, utilisation du service, et maintien aux études

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### ABSTRACT

This study focused on personal counselling clients in a community college in Ontario. Using archival records from the 2008–2009 academic year, at-risk client groups were identified and compared with respect to usage rates and retention. Significant differences were identified. Overall, first-year students who engaged in personal counselling had a 7.6% higher retention rate than that of the first-year student population as a whole. Students with confirmed disabilities (CD) and probable disabilities (PD) attended significantly more personal counselling appointments than students with no reported disabilities (ND). CD clients had a 15% higher retention rate than that of PD clients.

### RÉSUMÉ

Cette étude a porté sur les clients recevant des services de counseling personnel dans un collège communautaire ontarien. À partir des dossiers d'archives de l'année scolaire 2008–09, on a identifié des groupes de clientèles à risque et comparé les taux d'utilisation du service et de maintien aux études. L'exercice a permis d'observer des différences significatives. Dans l'ensemble, les étudiants de première année qui ont entrepris une démarche de counseling personnel affichaient un taux de maintien 7,6 % supérieur à celui de l'ensemble de la population des étudiants de première année. Les étudiants ayant des handicaps confirmés (CD) et des handicaps probables (PD) ont été présents à un plus grand nombre de rendez-vous de counseling personnel que les étudiants n'ayant aucun handicap signalé (ND). Les clients CD affichaient un taux de maintien 15 % supérieur à celui des clients PD.

Postsecondary education offers substantial quality-of-life and economic benefits for the individual, the institution, and Canadian society as a whole (Robison & Christophersen, 2008). Nevertheless, the current economic climate demands cost efficiency and accountability with respect to how government dollars are being utilized in postsecondary institutions. When students do not ultimately complete their programs and achieve their academic credential, there are a multitude of costs not only to the individual, but to the institution and taxpayers as well (Grayson & Grayson, 2003). This is of significant concern on all levels, given that the average graduation rate across Canadian community colleges and CEGEPs was found to be 65% (Shaienks, Gluszynski, & Bayard, 2008).

It has been reported that the greatest risk of student attrition occurs between the first and second year of college (Grayson & Grayson, 2003). In a recent study of first-year student retention, Fisher and Engemann (2009) found that the year-over-year retention rate at one Canadian community college was 62.7%, which translates to a concerning proportion (i.e., 37.3%) of first-year students who did not return to their studies the following academic year. Not surprisingly, college administrations across Ontario are investigating the best ways to strategically invest their resources to improve these numbers. Consequently, all areas within postsecondary institutions are being asked to account for how they contribute to student success and retention, and college counselling centres are no exception.

While college counsellors may engage in diverse functions, such as teaching and outreach programming, the supervision of counselling interns, and research, "the primary function of college counselling centers continues to be the provision of direct counselling interventions to students whose personal problems interfere with their ability to function in the academic environment" (Sharkin, 2004). Given the primary purpose of college counselling and the current economic reality, recent research has been focused on the relationship between counselling and student retention outcomes.

Illovsy (1997) found that the retention rate for students receiving personal counselling was 75% in comparison to 68% for the general student population. Moreover, the increase in retention was even more dramatic among first-year students: those who received counselling enjoyed a 10% higher retention rate than the first-year student population as a whole.

Wilson, Mason, and Ewing (1997) compared the retention rates of students who received psychological counselling to those who requested but did not receive counselling (due to missed appointments or to having declined an offered appointment when one became available). It was determined that counselled students achieved a 14% retention advantage over their non-counselled peers.

In a 6-year longitudinal study, Turner and Berry (2000) found that 70% of counselling clients reported that their personal problems were impacting their academics. Nevertheless, 43.8% reported that participating in psychological counselling helped them in deciding to continue their studies. Overall, counselling clients in this study enjoyed a retention rate that was 11.4% higher than that of the general student population.

Focusing on first-year and transfer students, and controlling for precollege academic performance, a significant relationship was found between psychological counselling experience and retention, such that counselled students were more than three times likelier to register in the third semester of their program than their non-counselled peers (Lee, Olson, Locke, Michelson, & Odes, 2009). Overall grade point average (GPA), however, was not significantly related to counselling experience.

DeStefano, Mellott, and Petersen (2001) compared counselled students to a control group of students with respect to three areas of adjustment. Researchers

found that although students seeking counselling scored significantly below the control group on all academic, social, and personal-emotional adjustment scales during the pretest, a significant increase between pretest and posttest scores was found for the counselling group on all three scales. This pretest-posttest difference seems to suggest that students who received counselling were positively affected by the experience which then translated into enhanced adjustment.

In a longitudinal study, Gerdes and Mallinckrodt (1994) had incoming students complete surveys in which they conveyed their expectations regarding how they would handle the adjustment to college. A year later, they completed a survey with questions about their actual adjustment. Another six years later, the transcripts of these students were assessed for academic standing. Students in good academic standing who left college without completing their program reported personal/emotional and adjustment concerns (e.g., managing their independence and separation from family), while those students who were struggling academically when they left college reported more stress/tension and career ambiguity. Similarly, another study found that student emotional health was related to both academic achievement and retention (Pritchard & Wilson, 2003), such that students with lower GPAs reported high stress levels, and students who reported more fatigue and lower self-esteem were more likely to drop out of school than their peers.

The current study is an attempt to expand on previous research by focusing on the relationship between personal counselling usage and retention rates for first-year students in comparison to the baseline retention rate of 62.7% (for the first-year general student population) as found at the same college in a previous study by Fisher and Engemann (2009). In line with previous research, it was expected that the retention rates of students who engaged in personal counselling would exceed those of the overall college student population.

Further, counsellors at the counselling centre being studied shared their perception that a growing number of students using personal counselling services reported that they had disabilities, often of a psychiatric nature, but were choosing not to formally identify themselves with the college. Registering with disability services at the college would have required them to submit documentation from a regulated health professional confirming that they had been diagnosed with a permanent disability. This would have then provided them access to academic accommodations (e.g., extended time on tests/exams, access to adaptive technology, peer tutoring) to support them in achieving their academic goals.

The current study is an attempt to enter into a previously unexplored area by determining the number of students with *probable disabilities* (PD) who utilized personal counselling services for emotional/relational/adjustment issues during the 2008–2009 academic year and comparing their appointment usage and academic retention rates to those of students with *confirmed disabilities* (CD) and those of students with *no reported disabilities* (ND). CD and ND students were separated into distinct groups because, although CD students fall into various disability categories (e.g., ADHD, learning disabilities, psychiatric,

medical), students among this group share a common distinction within the college system and thereby have access to enhanced academic supports. Due to the additional physical and/or emotional stress and challenges associated with disabilities, it was expected that CD and PD students would participate in a significantly greater number of counselling appointments than ND students. The top psychosocial issues that students brought to counselling were also identified.

#### METHOD

The archival records of 416 full-time college students at a large Ontario community college (population = 12,128) who sought personal counselling for psychosocial issues (e.g., depressive symptoms, anxiety/stress symptoms, eating disorders, relationship/family issues, grief) at the campus counselling centre during the 2008–2009 academic year were utilized. This study received approval for exemption from the community college's Research Ethics Board. The counsellor records utilized included 284 female (68.3%) and 132 male (31.7%) personal counselling clients ( $M = 24.2$  years, age range = 18–69,  $SD = 7.22$ ).

Doctoral- and master's-level counsellors and social workers, as well as supervised master's-level counselling psychology/social work interns, provided personal counselling services to students. Although most counsellors utilized a brief solution-focused counselling model, they approached counselling from a background of diverse theoretical perspectives (e.g., Rogerian, family-systems, cognitive-behavioural). Personal counselling was offered via scheduled 50-minute appointments. The wait time for initial appointments varied throughout the academic year from a few days to 2–3 weeks during peak periods. Follow-up appointments were usually scheduled within a week or two.

Clients in intense distress or at high risk for self-harm were seen more frequently. It should be noted that there was no cap on the number of counselling sessions a student could access during the academic year. The number of counselling sessions was based on individual student needs. Counsellors worked with students until issues were resolved, until individual students decided they no longer wished to continue counselling, or until students graduated—in which case, counsellors would often help to transition them to community-based counselling services. Students in crisis who needed immediate attention were seen the same day for 20-minute triage appointments offered through the centre. Only data related to standard 50-minute personal counselling appointments were included in the analyses.

#### *Procedure*

Data collection was archival in nature and covered the period from September 2008 to January 2010. A list of clients who engaged in personal counselling, including the number of appointments per client, was generated for the 2008–2009 academic year. The client list also indicated whether students were registered as

having a disability and, if so, into which category the CD fell (e.g., learning disability, ADHD, psychiatric). Client gender and birthdates were accessed through the counselling centre database. Individual transcripts for students who utilized counselling services during the 2008–2009 academic year were manually retrieved through the college's secure academic records data system and were coded for retention, according to the following criteria:

- A student successfully achieved their academic goal and graduated during the academic year being studied; or
- A student continued to be enrolled in full-time studies at the college during the following academic year (i.e., fall and/or winter semesters).

To assess probable disabilities among clients seen during the 2008–2009 academic year, clients for whom the counselling codes on the database indicated that the appointment dealt with issues related to depressive symptoms, anxiety/stress symptoms, eating disorders, medical issues, mental health, addictions/substance abuse, and/or abuse, *and* who were not already registered with Accessibility Services (i.e., the college's disability services department) were flagged and counsellor notes were coded. The coding of "PD" was assigned based on the whether any of the following were recorded in counsellor notes:

- Client reported medical diagnosis of anxiety disorder, bipolar disorder, depression, other mental illness, medical disability, or eating disorder, and/or client reported history of taking anti-anxiety or antidepressant medication as prescribed by a physician, and/or client reported hospitalization due to anxiety, depression, or suicide attempt;
- Client reported eating disorder;
- Client reported addiction (with respect to alcohol, prescription medication, and/or illegal substances); and/or
- Client reported diagnosis of posttraumatic stress disorder by a psychologist/psychiatrist.

Data were coded in such a way as to protect client anonymity in all reports. The data were transferred to and analyzed via Excel and SPSS software programs.

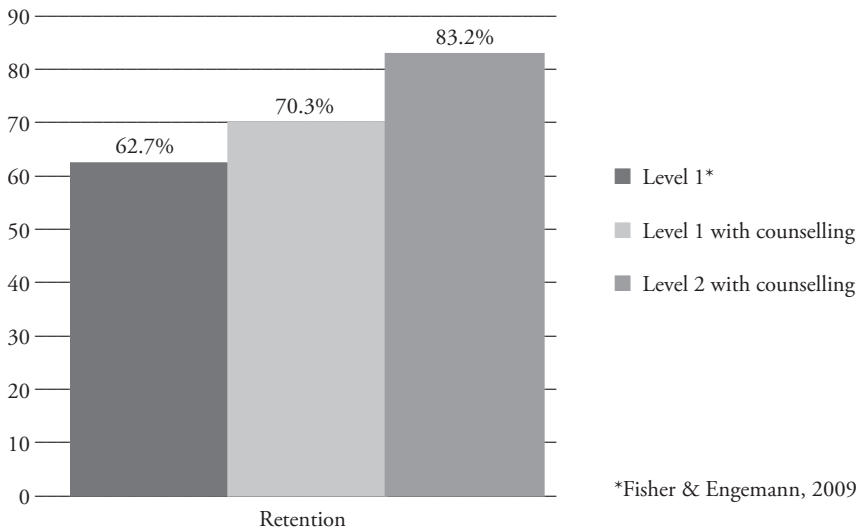
## RESULTS

During the course of the 2008–2009 academic year, 416 students participated in a total of 1,396 personal counselling appointments related to psychosocial issues. The average number of counselling visits was 3.4 ( $SD = 3.5$ ) with a range of 1 to 23. The correlation between number of appointments and retention was nonsignificant ( $p = .08$ ).

Among students provided personal counselling, the overall retention rate was 76.0%. Within this group, first-year students registered in level 1 of their program during the fall of 2008 ( $n = 232$ ) had a retention rate of 70.3%, which is 7.6% higher than the average first-year retention rate of 62.7% found by Fisher and

Engemann (2009). Students in level 2 or higher in their programs ( $n = 184$ ) who received personal counselling had a retention rate of 83.2% (see Figure 1). A chi-square test found a significant difference in retention rates between students who received personal counselling in level 1, and those in level 2 or higher ( $\chi^2(1, N = 416) = 9.34, p = .001$ ).

*Figure 1*  
*Personal Counselling and Student Retention*



CD and PD students accounted for 51.2% of clients and 62.1% of personal counselling appointment hours (see Table 1). A one-way ANOVA was conducted to determine whether there were any significant differences in the number of counselling appointments attended by clients in the CD, PD, and ND groups. Results indicated a statistically significant difference among the groups,  $F(2, 413) = 10.10, p < .001$ .

The Levene's test revealed unequal variances and the Games-Howell post hoc test revealed a significant difference between the number of appointments for ND clients ( $M = 2.61, SD = 2.19$ ) and the number of appointments for both CD clients ( $M = 4.34, SD = 4.71$ ) and PD clients ( $M = 3.66, SD = 3.78$ ). Both CD and PD clients participated in significantly more psychosocial counselling appointments than ND clients. With respect to practical significance, in terms of the difference in average number of appointments between the ND client group and each of the CD and PD client groups, effect sizes were determined to be "small" (Cohen, 1992), with Cohen's  $d = -0.47, r = -0.23$  for the CD client group and Cohen's  $d = -0.34, r = -0.17$  for the PD client group.

Table 1  
*Personal Counselling Service Usage by Student Groupings*

<i>Student groupings</i>	<i>Appointments</i>		<i>Unique individuals</i>		<i>Average # of appointments</i>
	<i>n</i>	<i>% of total</i>	<i>n</i>	<i>% of total</i>	
CD	551	39.5	127	30.5	4.34**
PD	315	22.6	86	20.7	3.66**
ND	530	37.9	203	48.8	2.61**

\*\* $p < .001$ , ND compared to CD and PD

Analyses were performed to look into the distribution of number of counselling visits based on client groupings. The ranges regarding number of counselling sessions for each group was ND 1 to 13 sessions, CD 1 to 21 sessions, and PD 1 to 22 sessions. See Table 2 for additional breakdowns.

Table 2  
*Breakdown of Number of Counselling Sessions by Client Grouping*

<i>Student groupings</i>	<i>% of clients who attended specified numbers of sessions</i>			
	<i>1 session</i>	<i>2–3 sessions</i>	<i>4–5 sessions</i>	<i>6 or more</i>
ND	39.4	37.4	12.8	10.3
CD	35.4	23.6	16.5	24.4
PD	25.6	40.7	18.6	15.1

Retention rates differed among student groups: CD = 81.9%, PD = 67.4%, and ND = 75.9%. A one-way ANOVA found significant differences among the groups with respect to retention rates,  $F(2, 413) = 2.95$ ,  $p = .05$ . Levene's test indicated variances were unequal, and the Games-Howell post hoc test revealed that a significant difference ( $p < .05$ ) existed between the CD and PD groups such that students in the CD group had a 15% higher rate of retention than those in the PD group.

Of the CD students who participated in psychosocial counselling, the largest disability category represented was psychiatric (38.6%), followed by learning disabilities (33.3%). Among the PD group, the largest disability category reported was psychiatric (95.3%), followed by medical (4.7%). The top five presenting psychosocial issues students brought to counselling, in order of ranking, were relationships/family, stress/anxiety, personal/social, depressive symptoms, and self-esteem.

## DISCUSSION

The average number of sessions for students receiving personal counselling was 3.4. No significant correlation was found between actual number of counselling sessions and retention. Counselling clients in level 1 of their college program were significantly less likely to be retained into the next academic year than counselling clients in level 2 or higher in their programs. As expected, first-year students who received personal counselling attained a higher rate of retention (i.e., 7.6% higher) in comparison to the general first-year student population. A group of PD students was identified among counselling clients, and as hypothesized, both CD and PD student groups participated in a significantly greater number of counselling appointments than did the ND student group. With respect to retention among counselling clients, CD students had a 15% higher retention rate than PD students, which was statistically significant.

The average number of counselling sessions per student in this study (i.e., 3.4) was much lower than the 6.2 sessions reported by Gallagher (2009). As stated previously, there was no cap on the number of sessions clients could attend. Counsellors worked with clients until issues were resolved or until clients chose to discontinue counselling. Given that counsellors in this setting tended to use a solution-focused counselling model, it is possible that this focus on client strengths and goals rather than problems allowed for reduced distress in a shorter time period. This would not be out of line with the research of Mireau and Inch (2009), who found that clients receiving brief solution-focused counselling, in a community mental health setting, experienced a significant reduction in symptoms within four counselling sessions. In the current study, however, given that client outcome surveys were not utilized, it remains unknown whether the smaller average number of sessions indicates that clients achieved their goals in fewer sessions, or if, on the contrary, they chose to discontinue counselling after a few sessions due to lack of results or other unrelated reasons. The finding that student engagement in personal counselling was significantly associated with a higher academic retention rate is in line with previous studies (Illovsky, 1997; Turner & Berry, 2000; Wilson et al., 1997). However, due to the fact that this is a correlational rather than causal relationship, caution must be undertaken in interpreting results. It may be argued that students who came to counselling chose to do so because, at some level, they had greater resources (e.g., maturity, problem-solving skills) or access to resources (e.g., social/family support) to begin with. Some factors that predict that individuals will *not* seek help when needed include (a) perceived stigma, (b) lack of perceived need, (c) lack of awareness of services, (d) scepticism about the effectiveness of treatment, and (e) coming from a low socioeconomic background (Eisenberg, Downs, Golberstein, & Zivin, 2009; Eisenberg, Golberstein, & Gollust, 2007).

Consequently, the help-seeking group, which was the focus of this study, may be a different group to begin with in comparison to the general student population as a whole. At the same time, it is important to remember that students who



chose to come to counselling did so because they had encountered an obstacle or barrier that was causing sufficient distress to warrant them seeking professional assistance. In this sense, it could be countered that without this assistance, their baseline retention rate would have been lower than that of the general student population, and thus the actual net benefit or advantage may even be higher than has been indicated. Regardless, at this point the relationship between counselling and higher retention among first-year students is a thought-provoking one that warrants further in-depth analysis.

One of the more interesting and tentative findings of this study is the emergence of a newly identified client subgroup, that is, clients with probable disabilities. What is intriguing about this subgroup is its apparent size (i.e., 10% of the clients receiving personal counselling); the fact that over 90% of these clients reported mental-health-related disabilities; and their reluctance/refusal to formally identify with disability services in the college, which would have allowed them access to additional academic, and possibly financial, supports. The World Health Organization (2001) estimates that nearly two thirds of those affected by mental health conditions never seek professional help as a result of discrimination, neglect, and stigma.

Moreover, studies have indicated that even among the one third to one half of college students who screened positively for significant mental health issues in the populations sampled, less than a quarter of these students actually sought help (Blanco et al., 2008; Rosenthal & Wilson, 2008). We need to learn more about these students. We need to determine specifically why they are reluctant to seek help and to identify with college disability services. Only then will we be able to more effectively address their concerns and support this group.

Both CD and PD students engaged in significantly more appointments than ND students. Although CD students make up approximately 11% of the student population at the college, they account for 30.5% of clients and 39.5% of personal counselling hours. If PD students are added to this number, then students with disabilities (both confirmed and probable) would account for over 60% of counselling hours. Based on the proportional numbers of students with disabilities using personal counselling services, it would appear that there may be a need for additional personal, emotional, and adjustment support among these students. Although students who register with disability services in postsecondary schools regularly receive academic supports, we may also want to consider, on a more regular basis, whether counselling supports should be recommended and provided from the outset.

Overall, counselling clients in the CD group enjoyed a 15% higher retention rate than those in the PD group. This is a significant difference. One of the factors that may be influencing this outcome is the fact that 27% of PD clients were first diagnosed during the 2008–2009 academic year, and the majority were dealing with mental health issues. This difference may be partly a consequence of the time and effort it takes for this type of illness to be recognized, diagnosed, and stabilized. This difference may also reflect the benefits of additional academic supports available to the CD group by virtue of their connection with disability

services. This is certainly an area that requires additional study. Nonetheless, this retention difference may be helpful in encouraging clients in the PD group to overcome their reluctance/resistance and to register with disability services so that they too might benefit from academic supports in addition to counselling support.

Finally, while retention is a valuable outcome measure, it needs to be acknowledged that academic retention is not in the best interest of every student (Rummel, Acton, Costello, & Pielow, 1999). Some students find that they are in a program that is not an appropriate fit and need to attend a different institution. Others, who are dealing with severe mental illness or medical issues, may need to take time away from school to focus on their health and stabilization before continuing their studies. In situations such as these, the role of the college counsellor is to use his/her knowledge and skills to support students in making decisions that are best for them in the context of their individual circumstances. While retention may be a helpful outcome measure, setting a goal of 100% retention would not only unrealistic, it would also be unethical.

### *Study Limitations*

While these findings provide additional data on student usage of personal counselling for psychosocial issues and how this is associated with academic retention, there are a number of limitations to note. Due to the fact that this study utilized archival data, rather than employing an experimental research design, the analyses were largely correlational in nature, and thus causal conclusions cannot be made. Additionally, having focused on only one Canadian college counselling centre in Ontario, it remains to be seen whether these observations are generalizable to other postsecondary settings. Uncontrolled variance was introduced in this study by virtue of the fact that the 9 counsellors and 3 counselling interns, who provided personal counselling services in the centre studied, came from diverse academic backgrounds and clinical perspectives (i.e., 1 Ph.D. in psychology, 1 M.A. in clinical psychology, 5 M.Ed. in counselling, 2 M.S.W.s, 1 M.S.W. intern, and 2 M.Ed. counselling psychology interns). Additional sources of uncontrolled variance were introduced by virtue of the fact that there were no systematic means available to evaluate the accuracy, intensity, or functional impairment of students' self-reported disabilities in the PD group, or to evaluate counsellor accuracy and consistency in recording client self-reported disabilities in the counselling record. Future studies should try to address some of these limitations.

### *Counselling Implications*

Based on the observations of this study, there are a number of implications for counselling in postsecondary settings, specifically with respect to providing services to students with confirmed and probable disabilities. Although counsellors are likely to be well versed in the potential psychosocial impact of mental health issues, there may be a need for increased counsellor awareness and education regarding the potential psychosocial impacts of a larger range of disabilities (e.g., learning, medical, ADHD), given the proportionally higher usage of personal

counselling services among CD students with various disabilities in comparison to the ND group. Moreover, in institutions where disability services are provided by a different group of professionals than those who provide personal counselling services, it will be important to establish and maintain connection and collaboration between these two groups of professionals to ensure that students receive seamless and integrated supports that are responsive not only to their academic but to their personal and social needs as well.

In terms of PD students (of whom 95% in the population studied indicated a likely psychiatric diagnosis), counsellors may want to be more conscientious when screening for possible mental health issues among their personal counselling clients so that those who are in need of diagnosis, treatment, and/or academic accommodations can access these services as quickly as possible. In situations where timely access to appropriate mental health and/or medical care is an issue, it may be important for counsellors to keep track of these delays, as well as the academic and personal consequences of these delays to their clients. This information can then be used as a foundation to advocate for greater access to resources for their clients.

Finally, counsellors may want to undertake public awareness and education campaigns in their institutions and to educate students and faculty about mental health issues. It is important to demystify these conditions and mitigate the negative stigma often attached to them.

#### CONCLUSION

There are clear benefits for all when individuals obtain a postsecondary education. College counselling centres play an important role in assisting individuals, and in helping our most vulnerable students achieve their goals. Moreover, the ongoing challenge for college counselling centres with limited resources continues to be finding the time to identify key client groups and needs, and developing appropriate and effective ways to respond to these needs. Despite the challenges, this is important research that must continue if we are to understand and stay effectively responsive to our clients.

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#### *References*

- Blanco, C., Okuda, M., Wright, C., Hasin, D. S., Grant, B. F., Liu, S., & Olfson, M. (2008). Mental health of college students and their non-college-attending peers. *Archives of General Psychiatry*, 65(12), 1429-1437. doi:10.1001/archpsyc.65.12.1429
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159. doi:10.1037/0033-2909.112.1.155
- DeStefano, T. J., Mellott, R. N., & Petersen, J. D. (2001). A preliminary assessment of the impact of counseling on student adjustment to college. *Journal of College Counseling*, 4, 113-121.

- Eisenberg, D., Downs, M. F., Golberstein, E., & Zivin, K. (2009). Stigma and help seeking for mental health among college students. *Medical Care Research and Review*, 66(5), 522-541. doi:10.1177/1077558709335173
- Eisenberg, D., Golberstein, E., & Gollust, S. E. (2007). Help-seeking and access to mental health care in a university student population. *Medical Care*, 45(7), 594-601. doi:10.1097/MLR.0b013e31803bb4c1
- Fisher, R., & Engemann, J. (2009). *Factors affecting attrition at a Canadian college*. Retrieved March 25, 2010, from <http://www.ccl-cca.ca/pdfs/fundedresearch/Fisher-FinalReport.pdf>
- Gallagher, R. P. (2009). *National survey of counseling center directors 2009*. Retrieved March 25, 2010, from <http://www.education.pitt.edu/survey/nsccl/archivel/2009/monograph.pdf>
- Gerdes, H., & Mallinckrodt, B. (1994). Emotional, social, and academic adjustment of college students: A longitudinal study of retention. *Journal of Counseling and Development*, 72(3), 281-288.
- Grayson, J. P., & Grayson, K. (2003). *Research on attrition and retention*. Retrieved August 23, 2010, from [http://www.millenniumsolarships.ca/images/Publications/retention\\_final.pdf](http://www.millenniumsolarships.ca/images/Publications/retention_final.pdf)
- Illovsky, M. E. (1997). Effects of counseling on grades and retention. *Journal of College Student Psychotherapy*, 12(1), 29-44. doi:10.1300/J035v12n01\_04
- Lee, D., Olson, E. A., Locke, B., Michelson, S. T., & Odes, E. (2009). The effects of college counseling services on academic performance and retention. *Journal of College Student Development*, 50(3), 305-319.
- Mireau, R., & Inch, R. (2009). Brief solution-focused counselling: A practical effective strategy for dealing with wait lists in community-based mental health services. *Social Work*, 54(1), 63-70.
- Pritchard, M. E., & Wilson, G. S. (2003). Using emotional and social factors to predict student success. *Journal of College Student Development*, 44(1), 18-28. doi:10.1353/csd.2003.0008
- Robison, M. H., & Christophersen, K. A. (2008). *The economic contribution of Canada's colleges and institutes*. Retrieved August 23, 2010, from [http://www.accc.ca/english/publications/reports/2008economic\\_study.htm](http://www.accc.ca/english/publications/reports/2008economic_study.htm)
- Rosenthal, B., & Wilson, W. C. (2008). Mental health services: Use and disparity among diverse college students. *Journal of American College Health*, 57(1), 61-67. doi:10.3200/JACH.57.1.61-68
- Rummel, A., Acton, D., Costello, S., & Pielow, G. (1999). Is all retention good? An empirical study. *College Student Journal*, 33(2), 241-246.
- Shaienks, D., Gluszynski, T., & Bayard, J. (2008). *Postsecondary education – Participation and dropping out: Differences across university, college and other types of postsecondary institutions*. Retrieved April 6, 2011, from <http://www.statcan.gc.ca/pub/81-595-m/81-595-m2008070-eng.htm>
- Sharkin, B. S. (2004). College counseling and student retention: Research findings and implications for counseling centers. *Journal of College Counseling*, 7, 99-108.
- Turner, A. L., & Berry, T. R. (2000). Counseling center contributions to student retention and graduation: A longitudinal assessment. *Journal of College Student Development*, 41(6), 627-636.
- Wilson, S. B., Mason, T. W., & Ewing, M. J. (1997). Evaluating the impact of receiving university-based counseling services on student retention. *Journal of Counseling Psychology*, 44(3), 316-320. doi:10.1037/0022-0167.44.3.316
- World Health Organization. (2001). *The World Health report 2001: Mental disorders affect one in four people*. Retrieved on July 28, 2004, from <http://www.who.int/inf-pr-2001/en/pr2001-42.html>

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