“I Want Help!”: Psychologists' and Physicians' Competence, Barriers, and Needs in the Management of Eating Disorders in Children and Adolescents in Canada
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“I Want Help!”: Psychologists’ and Physicians’ Competence, Barriers, and Needs in the Management of Eating Disorders in Children and Adolescents in Canada

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Studies show that physicians are dissatisfied with their training in the area of eating disorders in general, and a number of practice barriers and training needs have been identified. There are no known studies examining attitudes and needs of physicians or psychologists with respect to eating disorders in children and adolescents in Canada. This study’s objectives are to examine primary care clinicians’ self-assessed competence, barriers, and needs with respect to the diagnosis and treatment of eating disorders in children and adolescents. A 20-item survey was developed to obtain information from family physicians and psychologists in Ontario, Canada. Findings of this study suggest that, with some exceptions, self-assessments of competence are low, and barriers to practice include lack of skill, case complexity, and lack of resources. Identified training needs suggest that, despite discipline-specific differences, a large proportion of clinicians report an interest in learning more about all areas of the management of pediatric eating disorders, including prevention efforts. In Ontario, primary care clinicians are interested in receiving training and support to better identify and treat children and adolescents with eating disorders. As such, it is worthwhile to increase the number of training opportunities for students and professionals alike.

Keywords: eating disorders, children and adolescents, practice barriers, training, primary care

There are three main categories of eating disorders (ED) found in the DSM–IV (American Psychiatric Association, 2000): anorexia nervosa (AN), bulimia nervosa (BN), and eating disorders not otherwise specified (EDNOS). AN is characterized by a refusal to maintain one’s weight above 85% of an individual’s ideal body weight for age, gender, and development, whereas BN is characterized by recurrent binge eating followed by some method of compensation. EDNOS is the diagnostic category for disorders related to eating disturbances that do not meet the criteria for any specific ED but that are worthy of clinical attention. The majority of ED diagnoses fall into this category.

In youth, ED are the third most common chronic disease among adolescent females after asthma and obesity (Golden et al., 2003) and are among the priority mental health illnesses identified by the World Health Organization (2004). Prevalence rates of AN are estimated at 0.2% to 3.7% of young females (Lucas, Beard, O’Fallon, & Kurland, 1991; American Psychiatric Association, 2006) and approximately 1% of males, whereas the prevalence rates of BN are reported at 1% to 2% in young females (Lucas et al., 1991) and 0.5% in males (Hudson, Hiripi, Pope, & Kessler, 2007). Although no formal agreement upon prevalence rates are available for EDNOS, some have suggested rates of 14.6% for females (Hudson et al., 2007). When the age of onset falls between the ages of 10–15, ED can result in a 25-year reduction of life span (Norris, Bondy, & Pinhas, 2011), and the annual mortality rate of anorexia in adolescent females is 12 times that of the general population (National Institute of Mental Health, 2001). Consistent with the age of onset of ED, hospitalization rates are high among adolescents. In Canada, since 1987, hospitalizations for ED in general hospitals have increased by 34% among adolescent females under the age of 15 (Public Health Agency of Canada, 2002) making it such that clinicians without specific expertise in ED may encounter these complex and life-threatening illnesses more frequently. ED pose particular treatment challenges and it is important to intervene early in the illness development to prevent more chronic and treatment-resistant forms of AN and BN from developing (le Grange & Loeb, 2007). Currently, outpatient family-based therapy with medical management is the most widely cited treatment that has been shown to be effective for adolescent ED (see Loeb and le Grange, 2009, for a review of the research findings). This model of treatment can be very effective in the treatment of children and adolescents with ED; however, although many adolescents and...
their families recover with family-based therapy, a significant minority does not respond adequately to this treatment modality (Eisler et al., 1997; Lock et al., 2010; Treasure & Russell, 2011).

Skill-Level and Satisfaction With Training
Lafrance Robinson, Boachie, and Lafrance (2012) found that a large proportion of clinicians surveyed do not routinely screen for ED in children and adolescents, and when ED are assessed and treatment is initiated, family members are not always involved in the process. Recent research also suggests that physicians are dissatisfied with the level of training they receive with respect to the assessment, diagnosis, and treatment of ED. For example, Boulé and McSherry (2002) surveyed family physicians to assess their attitudes and behaviors toward ED patients in the general population. In terms of training, the authors found that approximately 75% of family physicians rated their undergraduate training in the assessment and management of ED as poor, with 59% feeling dissatisfied with their postgraduate training as well. A study conducted in the United States found that of physicians from family practice, internal medicine, and pediatrics surveyed in the context of adolescent medicine, approximately 70% of the total sample described their training in ED as insufficient (Blum, 1987). Despite this finding, very few (15.7%) reported a desire to increase their proficiency in this area. Although no information was gathered as to the reasons why physicians were uninterested in additional learning opportunities, the author highlighted the need to address this resistance in medical school to prevent it from persisting for the duration of their clinical practice. In terms of ED training with children and adolescents in Canada more specifically, there is currently no research available among primary care clinicians.

Barriers to Practice and Information/Training Needs
Results from a needs assessment conducted among family physicians by Clarke and Polimeni-Walker (2004) revealed that inhibiting factors related to the management and treatment of ED in the general population included a lack of physician skill, limited resources, problems with patient cooperation, illness severity, and a lack of time. As such, the authors concluded that continuing education was crucial in improving diagnostic skills and enhancing level of comfort with the management of ED in general. Similarly, physicians surveyed by Boulé and McSherry (2002) identified training gaps and needs, which included outpatient services, diagnostic methods, management planning, and screening tools.

The Current Study
Overall, it is clear that physicians are dissatisfied with their training with respect to the assessment and treatment of ED in the adult population, and in general. However, there have been no Canadian studies to date examining attitudes with respect to ED in child and adolescent populations, despite the fact that with early intervention, the prognosis for recovery from an ED may be improved (le Grange & Loeb, 2007). In addition, there is no known research conducted with child and adolescent psychologists in this area, despite their ability to assess, diagnose, and treat psychological disorders, including ED. As a result, this study’s objectives are twofold: (a) to examine primary care clinicians’ (including physicians, psychologists and psychological associates) self-assessed competence with the assessment, diagnosis, and treatment of ED in children and adolescents; and (b) to identify their self-reported barriers to practice and information/training needs. In addition, we explored whether self-assessed competence, barriers to practice and information needs varied in relation to participants’ discipline (physician/psychologist), clinic status (the self-reported absence/presence of children and adolescents with EDs within an individual’s practice), and self-assessment of ability and training in the diagnosis and treatment of ED in children and adolescents.

Method

Participants
On the basis of information gathered from web-based directories (The College of Physicians and Surgeons of Ontario and The College of Psychologists of Ontario) and electronic LISTSERVs (Ontario Psychological Association and Ontario College of Family Physicians), approximately 780 family physicians and psychologists/psychological associates1 in Ontario, Canada were invited to anonymously complete either a mail-in or a web version of a survey if their practices included children and/or adolescents. An estimated response rate of 21.5% was achieved in spite of the elite population, as well as the length and the anonymous nature of the survey instrument (see Asch, Jedrzewski, and Christakise, 1997, for a discussion of the ways in which these factors can reduce response rates). The mail-in responses accounted for a slightly higher percentage (56%) of the returns. Fifteen surveys were removed from the analysis because respondents did not specify discipline, leaving a valid sample of 153 for this study. Additional details regarding recruitment are described in Lafrance Robinson et al. (2012).

In terms of sample characteristics, the disciplines were equally represented with 76 physicians and 77 psychologists. Approximately 63% (n = 96) of the total sample reported seeing ED in their practice (subsequently referred to as ED clinic status group; 37.5% of these were psychologists and 62.5% of physicians). The remainder were categorized as non-ED in that they may have encountered EDs in their practice as a function of serving a population of children and adolescents but they did not provide these patients with formal service.

At the time of the survey, ED patients were reported to account for about 3.5% of the children/adolescents in the physicians’ clinics (Mdn = 200) and 12% of the psychologists’ child/adolescent caseload (Mdn = 20).

Materials
As part of a larger study, participants were invited anonymously complete a 20-item survey concerning the assessment and treatment of pediatric ED (Lafrance Robinson et al., 2012). The survey was developed for primary care clinicians working with children and adolescents on the basis of previously pub-

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1 From here on, the term psychologist is used to describe both psychologists and psychological associates.
lished survey instruments (Boulé & McSherry, 2002; Clarke & Polimeni-Walker, 2004). Several clinicians reviewed a draft of the survey and revisions were made based on their feedback. The study received approval from the institutional research ethics board.

Four survey questions with 5-point scales (with values ranging from strongly disagree to strongly agree) were used to establish self-assessed competence with respect to the diagnosis and treatment of ED in children and adolescents. The focal questions included (a) comfort with diagnostic ability (“I feel comfortable making the diagnosis of an eating disorder”), (b) satisfaction with diagnostic training (“I am satisfied with the training I have received regarding eating disorder diagnosis”), (c) comfort with treatment ability (“I feel comfortable providing the necessary treatment for a patient with an eating disorder”), and (d) satisfaction with treatment training (“I am satisfied with the training I have received in providing treatment for a patient with an eating disorder”).

To summarize, the results of the four questions, using a 5-point scale for a self-assessment competence score, was derived by computing the number of strongly agree/agree responses to all four self-assessment questions, where 0 = no comfort/satisfaction, 1 = very low, 2 = low, 3 = moderate, and 4 = high. Four self-assessment subscores were derived by aggregating pairs of questions that addressed: (a) diagnostic ability and training, (b) treatment ability and training, (c) diagnostic and treatment ability, and (d) diagnostic and treatment training.

Subsequently, a self-assessment grouping variable was derived by categorizing participants according to their collective self-assessment scores, where scores at or below the “low” level were considered “low” with respect to self-assessed competence, and the remaining scores were considered “high” with respect to self-assessed competence.

Statistical Procedures

Descriptive statistics include (a) the median for ordinal and nonnormal continuous variables, and (b) percentages for categorical variables.

Group differences were assessed on the basis of primary grouping variables, and where warranted, interactions among them. The primary grouping variables were (a) discipline (physicians/psychologists), (b) clinic status (non-ED/ED), and (c) self-assessment (low/high). Odds ratios (OR) and their corresponding 95% confidence intervals (CIs), Fisher’s exact test (chi-square), and Mann–Whitney (U) tests were used to detect group differences, if any. The adjusted standardized residuals produced with chi-square contingency table analyses were examined to locate group differences associated with individual response values. An adjusted standardized residual value >2 was considered significant.

Group effects from categorical data were assessed using Phi. An r estimate (Z/sqrt(N)) was computed for Mann–Whitney tests. All statistical tests were two-tailed, the level of significance was $\alpha = 0.05$, with $p$ values < .05 (exceptions noted). Nonsignificant results are omitted.

Results

Self-Assessment

Overall, median self-assessment scores across disciplines were very low, with the exception of ED psychologists whose median score was moderate. ED psychologists ($Mdn = 3$) had significantly higher self-assessed competency scores than both the non-ED psychologists ($Mdn = 1$), $N = 64$, $U = 336.0$, $Z = 2.46$, $p < .05$, $r = .31$ and the ED physicians ($Mdn = 1$), $N = 89$, $U = 557.0$, $Z = 3.02$, $p < .01$, $r = .32$. Table 1 presents the overall and comparator frequencies, medians and group differences.

According to the high/low self-assessment classification, 89.5% of physicians and 62.5% of psychologists reported low self-assessments. Physicians were 2.2 times more likely than psychologists to have low self-assessments (OR, CIs = 1.1, 4.4). No association was detected between self-assessment and clinic status; non-ED clinicians were just as likely as their ED counterparts to report high or low assessments.

Barriers to ED Practice

More than 90% of the total sample indicated that they encountered child or adolescent patients who presented with ED who they were unable to treat. Participants were provided with a list of six barriers and asked to select any that contributed to this inability to treat. Frequencies and relevant discipline, clinic status, and self-assessment effects are presented in Table 2.

Both disciplines, irrespective of clinic status, endorsed the same top three items (though ranked slightly differently in some cases): lack of skills, case complexity, and lack of resources. Group differences are discussed for the three most frequently selected items.

Lack of skills. Non-ED psychologists were 4.2 (OR, CIs = 1.4, 12.7) times more likely than ED psychologists to identify this item. There was a significant self-assessment effect, irrespective of discipline; psychologists with low self-assessment were 20.8 (OR, CIs = 4.0, 109.6) times more likely than their high self-assessment counterparts to identify lack of skills as a barrier.

Complexity. ED psychologists were 8.3 (OR, CIs = 2.5, 27.6) times more likely than non-ED psychologists to identify this item. There was a significant self-assessment effect; irrespective of discipline, where clinicians with high self-assessment were 6.8 (OR, CIs = 1.8, 25.7) times more likely than their low self-assessment counterparts to identify case complexity as a barrier.

Lack of resources. There were no group differences attributable to discipline, clinic status, or self-assessment for this item. Although respondents had the opportunity to select up to six barriers, 57% of them made only one selection. Physicians selected multiple barriers ($Mdn = 2$) more often than psychologists ($Mdn = 1$), $N = 120$, $U = 1269.5$, $Z = 3.10$, $p < .01$, $r = .28$. Similarly, ED clinicians ($Mdn = 2$) selected multiple barriers more often than non-ED clinicians ($Mdn = 1$), $N = 120$, $U = 1222.00$, $Z = 2.558$, $p = .01$, $r = .23$. There were no significant interactions noted.

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Note that for specific analyses, the sample size varies as a result of participants failing to answer particular survey questions or subsets thereof.

The self-assessment subscore results were quite similar to their respective collective score results and as such, are not presented.
Participants were provided with a list of 15 topics and asked to identify as many “areas of interest for information on eating disorders in children and adolescents.” Except for inpatient management, every item was selected by at least 40% of at least one discipline or clinic status. The three items selected infrequently were disclosure of ED diagnosis, management planning, and inpatient management. Frequencies and grouping variable effects are presented in Table 3.

Grouping variable effects were detected for seven of the 15 items. Discipline by clinic status grouping effects were noted for six items, whereas self-assessment effects were detected for five items.

Early identification. All of the physicians and the non-ED psychologists were more likely than the ED psychologists to select this item (OR = 3.5, CIs = 1.6, 7.9).

Outpatient management. Physicians were 3.5 times more likely than psychologists to select outpatient management, irrespective of clinic status or self-assessment status (OR, CIs = 1.7, 7.3).

Distinguishing ED from disordered eating. All of the physicians and the non-ED psychologists were more likely than the ED psychologists to select this item (OR = 2.4, CIs = 1.1, 5.3). Psychologists with low self-assessments tended to select this item more often than their psychologist counterparts with high self-assessments (OR = 3.9, CIs = 1.2, 12.5).

Behaviors and psychological symptoms. Psychologists with low self-assessments tended to select this item more often than psychologists with high self-assessments (OR = 5.0, CIs = 1.6, 16.1) and more often than physicians with low self-assessments (OR = 3.1, CIs = 1.3, 7.5).

Psychopharmacology. Physicians were 10.1 times (OR, CIs = 4.6, 22.5) more likely than psychologists to select this item, irrespective of clinic or self-assessment status.

Medical assessment. Physicians were 10.6 times (OR, CIs = 4.6, 24.4) more likely than psychologists to select this item, irrespective of clinic or self-assessment status.

Consultation. Non-ED physicians selected this item 4.4 times (OR, CIs = 1.3, 14.3) more often than all other clinicians.

### Discussion

The current study objectives were to examine primary care clinicians’ self-assessed competence with the diagnosis and treatment of ED in children and adolescents, as well as to identify their self-reported barriers to practice and information/training needs. Barriers to practice and training needs were also explored in relation to participants’ discipline, clinic status, and self-assessment of ability and training in the diagnosis and treatment of ED in children and adolescents.

In terms of self-assessed competence with the diagnosis and treatment of pediatric ED, the results suggest that, in general, surveyed physicians and non-ED psychologists report very low self-assessments, compared to ED psychologists’ moderate to high self-assessments. These results mirror those reported from previous studies indicating that training in the area of pediatric ED is unsatisfactory; with the exception of ED psychologists who rate their competence significantly higher. This finding may be due to the fact that compared to primary care physicians, psychologists...
can be more selective about accepting referrals that fit best within
their scope of practice. As such, those psychologists who diagnose
and treat pediatric ED are more likely to have chosen to practice in
this specialized area, as well as to have received relevant training.

In terms of practice barriers, the results were very clear that
nearly all clinicians encountered patients with ED who they were
unable to treat. Lack of skill, case complexity and lack of resources
were the primary obstacles faced by clinicians, as opposed to other
more logistical factors such as lack of time or poor remuneration.

Interestingly, clinicians low in self-assessments tended to identify
lack of skill as a primary obstacle, whereas clinicians high in
self-assessments endorsed the item related to case complexity most
frequently. This same pattern of results was observed between
non-ED and ED psychologists. This finding lends further support
to the hypothesis that ED psychologists may be more likely to
obtain specialized training in this area, and thus would bechal-
\ldots

**Table 3**

<table>
<thead>
<tr>
<th>Information/training needs</th>
<th>Total</th>
<th>Non-ED Phy</th>
<th>Non-ED Psy</th>
<th>ED Phy</th>
<th>ED Psy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample, subsample size</td>
<td>136</td>
<td>13</td>
<td>35</td>
<td>54</td>
<td>34</td>
</tr>
<tr>
<td>Early identification</td>
<td>61%</td>
<td>62%</td>
<td>66%</td>
<td>72%</td>
<td>38%</td>
</tr>
<tr>
<td>Outpatient management</td>
<td>58%</td>
<td>77%</td>
<td>43%</td>
<td>72%</td>
<td>44%</td>
</tr>
<tr>
<td>Distinguishing ED from disordered eating</td>
<td>57%</td>
<td>54%</td>
<td>60%</td>
<td>67%</td>
<td>41%</td>
</tr>
<tr>
<td>Treatment of “risk” factors</td>
<td>54%</td>
<td>54%</td>
<td>60%</td>
<td>50%</td>
<td>53%</td>
</tr>
<tr>
<td>Involvement of family in treatment</td>
<td>54%</td>
<td>54%</td>
<td>60%</td>
<td>48%</td>
<td>56%</td>
</tr>
<tr>
<td>Behaviors and Psy symptoms</td>
<td>46%</td>
<td>31%</td>
<td>60%</td>
<td>43%</td>
<td>41%</td>
</tr>
<tr>
<td>Factors affecting prognosis</td>
<td>46%</td>
<td>31%</td>
<td>51%</td>
<td>46%</td>
<td>44%</td>
</tr>
<tr>
<td>Psychopharmacology</td>
<td>44%</td>
<td>77%</td>
<td>14%</td>
<td>69%</td>
<td>24%</td>
</tr>
<tr>
<td>Psychotherapy/supportive counseling</td>
<td>43%</td>
<td>54%</td>
<td>46%</td>
<td>39%</td>
<td>41%</td>
</tr>
<tr>
<td>Co-morbid psychiatric diagnosis</td>
<td>42%</td>
<td>31%</td>
<td>40%</td>
<td>37%</td>
<td>56%</td>
</tr>
<tr>
<td>Medical assessment</td>
<td>39%</td>
<td>62%</td>
<td>11%</td>
<td>65%</td>
<td>18%</td>
</tr>
<tr>
<td>Disclosure of eating disorder diagnosis</td>
<td>32%</td>
<td>23%</td>
<td>40%</td>
<td>37%</td>
<td>21%</td>
</tr>
<tr>
<td>Consultation</td>
<td>30%</td>
<td>62%</td>
<td>23%</td>
<td>28%</td>
<td>29%</td>
</tr>
<tr>
<td>Management planning</td>
<td>25%</td>
<td>46%</td>
<td>20%</td>
<td>30%</td>
<td>15%</td>
</tr>
<tr>
<td>Inpatient management</td>
<td>13%</td>
<td>23%</td>
<td>9%</td>
<td>7%</td>
<td>21%</td>
</tr>
</tbody>
</table>

**Note.** ED = pediatric eating disorder; Phy = physicians; Psy = psychologists.

\*1,2,3,4,5 = Significant group differences detected by \( \chi^2 \) exact test, comparator groups share symbols row-wise within grouping factors.

\*5 \( p < .05 \).

suggest that the development and delivery of a broad range of
training activities for clinicians could be appropriate. The infor-
mation and training needs data also suggests that perhaps non-ED
clinicians would be interested in managing EDs if training is
provided and potential barriers are addressed. That being said,
inpatient management seems to be the exception. Very few cli-
nicians identified a need for more information or training in the
management of ED on an inpatient unit. Although it is possible
that clinicians surveyed did not have relevant hospital privileges,
this finding is consistent with anecdotal reports that many cli-
nicians avoid this work because of its intensity and specialized
interventions, especially on general pediatric units.

Finally, the pattern of results of mostly low levels of self-
assessed competence coupled with a strong interest for information
on a variety of topics could indicate that clinicians do not tend to
believe that they are mainly responsible for the successful treat-
ment of ED. This finding has significant clinical implications in
that clinicians must be self-reflective and must strongly consider
the impact of their own levels of competence on the success of the
treatment they provide, rather than attributing failures to the client
or the family.

In light of the results, it is worthwhile to advocate for increasing
the number of formal training opportunities in the area of pediatric
ED during medical school and doctoral studies and beyond. These
efforts are particularly worthwhile given the self-identified train-
ing needs of clinicians, as well as the chronicity, mortality rates,
and health care costs associated with the illness.

**Limitations**

The response rate for this study could be considered low, espe-
cially for family physicians. As such, the generalizability of the
study results is affected. It is also possible that clinicians who did
not complete the survey differed from respondents in significant
ways, leading to the potential for biased results. For example, it could be that clinicians who chose to complete the questionnaire already had an interest in the topic, therefore inflating the results relating to information and training needs. Finally, it is possible that participants may have interpreted questions in slightly different ways, particularly with respect to their interpretation of what it means to encounter children and adolescents with ED in their practice.

Future studies should corroborate self-reported assessments of competence with objective indicators as well as survey other health and mental health professionals with respect to barriers to practice and training needs in the management of ED in children and adolescents. This broader scope would include health and mental health clinicians such as social workers and dietitians, and medical specialists who may be referring to specialized centers, such as pediatricians, gastroenterologists, and so forth. In light of the current study’s result, it might also be worthwhile to survey graduate and postgraduate students who are currently in the process of being trained.

Résumé
Des études révèlent que les médecins sont insatisfaits de leur formation en matière de troubles alimentaires en général; des obstacles à la pratique et des besoins en formation à ce sujet ont été cernés. Il n’y a aucune étude connue qui examine les attitudes et les besoins des médecins ou des psychologues en ce qui a trait aux troubles alimentaires chez les enfants et les adolescents au Canada. La présente étude a pour objectif d’examiner la compétence autoévaluée, les obstacles et les besoins des clinicien des soins primaires en ce qui concerne le diagnostic et le traitement des troubles alimentaires chez les enfants et les adolescents. Un questionnaire de 20 items a été établi en vue d’obtenir de l’information auprès de médecins de famille et de psychologues en Ontario. Les résultats de la présente étude suggèrent que, sauf quelques exceptions, les compétences autoévaluées sont faibles, et les obstacles à la pratique incluent le manque de compétences, la complexité des cas et le manque de ressources. Les besoins en formation cernés suggèrent que, en dépit de différences propres à leur discipline, une grande proportion des cliniciens sont intéressés à améliorer leurs connaissance dans tous les domaines de la gestion des troubles alimentaires chez les enfants, y compris la prévention. En Ontario, les cliniciens de soins primaires sont intéressés à obtenir une formation et un appui en vue de mieux cerner et de mieux traiter les enfants et les adolescents souffrant d’un trouble alimentaire. Ainsi, il serait important de multiplier les occasions de formation offertes aux étudiants et aux professionnels.

Mots-clés : troubles alimentaires, enfants et adolescents, obstacles à la pratique, formation, soins primaires.

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