

Prescription Privileges for Psychologists: Opinions of Pediatric Psychologists and Pediatricians

William A. Rae,¹ PhD, Amanda Jensen-Doss,^{1,2} PhD, Rachel Bowden,¹ BS, Marissa Mendoza,¹ BA, and Tanya Banda,¹ BS

¹Department of Educational Psychology and ²Department of Psychology, Texas A&M University

Objective To examine the opinions of pediatricians and pediatric psychologists concerning prescription privileges for psychologists. **Methods** 213 pediatric psychologists and 119 pediatricians returned surveys regarding their opinions about cost, access, and quality of psychological care if psychologists had prescription privileges. **Results** Pediatric psychologists had significantly more positive views of prescription privileges than pediatricians. Despite not being in favor of prescription privileges, most pediatricians said that prescription privileges would not negatively impact their professional relationship, although ~37% said it would. **Conclusion** Pediatric psychologists and pediatricians differ significantly in their opinions about prescription privileges for psychologists. The implications of these findings for the working relationship between these two disciplines are discussed.

Key words opinion survey; pediatricians; prescription privileges; professional collaboration.

Since 1995, obtaining prescription privileges for psychologists has been a major initiative of the American Psychological Association (APA). During the last few years there have been numerous task forces, training programs, and legislation directed toward this goal (Daw, 2002). Psychologists in the U.S. Territory of Guam in 1998, the State of New Mexico in 2002, and the State of Louisiana in 2004 were legally granted the authority to prescribe medications. While all three laws have similar requirements regarding additional coursework, some supervision by a physician, and prescriptive authority limited to psychotropic medications only, they differ in the amount of coursework (e.g., 400 hr in New Mexico vs. a clinical psychopharmacology master's degree in Louisiana) and physician supervision (e.g., 2 years in New Mexico vs. indefinite supervision in Louisiana). There continues to be interest in prescriptive authority bills in other states (Goode, 2002). At the same time, the use of psychotropic medications is increasing and the use of psychotherapy is decreasing, as clients have increasingly received medication for mental health

disorders from physicians (Olfson, Marcus, Druss, & Pincus, 2002).

Psychologists have been informally monitoring and managing the psychotropic medications prescribed to their clients for years (Williams, 2000). It seems logical that training in understanding the effects of medications on behavior and the ways in which they assist or impede the progress of psychosocial treatment would be important for psychologists. However, the privilege to *prescribe* would require further training, beyond simply understanding the effects of the medication. The implications of prescriptive authority continue to cause heated debate between those in favor of and those against prescription privileges for psychologists.

Rae (1998) has argued that the value of psychological services in pediatric psychology should be evaluated within the domains of affordability (cost), accessibility (access), and effectiveness (quality). Arguments in support of prescription privileges have been made in each of these domains. First, for those receiving psychotherapy and medication treatments, prescription privileges for

All correspondence concerning this article should be addressed to William Rae, Department of Educational Psychology, Texas A&M University, 4225 TAMU, College Station, TX 77845. E-mail: warae@tamu.edu.

Journal of Pediatric Psychology 33(2) pp. 176–184, 2008

doi:10.1093/jpepsy/jsm072

Advance Access publication September 20, 2007

Journal of Pediatric Psychology vol. 33 no. 2 © The Author 2007. Published by Oxford University Press on behalf of the Society of Pediatric Psychology. All rights reserved. For permissions, please e-mail: journals.permissions@oxfordjournals.org

psychologists could reduce the *cost* of care by eliminating the need to see a primary care physician for medications. Second, DeNelsky (1991) has argued that prescription privileges for psychologists would create greater *access* to mental health services for underserved populations such as the seriously mentally ill living in rural communities. Similarly, the right to prescribe may increase access by allowing practicing psychologists to provide services in settings they do not traditionally serve, such as nursing homes and long-term facilities (De Leon & DeNelsky, 1993; DeLeon & Wiggins, 1996). Third, the *quality* of care might be improved for treatment of mental and behavioral disorders, as primary care physicians have limited skills in psychological treatment (Williams, 2000). The role of the pediatric psychologist in pharmacotherapy has traditionally involved helping the physician decide when to use medication, assessing medication response, and aiding in adherence (DuPaul, McGoey, & Mautone, 2003). Prescription privileges would streamline this process, allowing the psychologist more flexibility to make decisions regarding the use of medication or psychological treatments as appropriate (DeLeon & DeNelsky, 1993), a flexibility most physicians do not have due to lack of training in psychological treatments.

In the past two decades, numerous studies have surveyed the attitudes and opinions of psychologists regarding prescription privileges. In general, a majority of psychologists have endorsed prescription privileges by appropriately trained professional psychologists (Sammons, Gorny, Zinner, & Allen, 2000), but this has also been described as a slight majority (Long, 2005). Similarly, a meta-analysis of 16 studies of psychologists' opinions about prescription privileges conducted between 1980 and 1999 found no clear consensus among the respondents (Walters, 2001). When specific sub-disciplines of psychology are examined, however, some patterns do emerge. Surveys of clinical psychologists have reported results consistent with Walters' findings, with respondents tending to be either strongly opposed to or strongly in favor of prescription privileges (Bush, 2002; Plante, Boccaccini, & Andersen, 1998). A similar split was found among clinical neuropsychologists, ~51% of whom favored prescription privileges, with many maintaining concerns over the complexity of training needed (Chatel, Lamberty, & Bieliauskas, 1993). A survey of trainees and supervisors in pre- and post-doctoral training sites indicated that the inclination to pursue prescription training was influenced by the cost of the training, years of training required, and how long the respondent had been in the profession (Fagan, Ax, Liss, Resnick, & Moody, 2007).

To date, the opinions of pediatric psychologists regarding prescription privileges have been largely unexplored. Given that this group of psychologists generally works more closely with medical practitioners than many other specialty groups of psychologists, it seems likely that this group might have unique concerns about the implications of prescription privileges. In addition, although the American Medical Association (AMA) has a formal policy opposing prescription privileges for psychologists (H-345.989 Psychologist Prescribing, 2007), pediatricians have not been surveyed as to their opinions. Given the close collaborative relationship between pediatric psychologists and pediatricians (Drotar, 1995), the issue of prescription privileges for psychologists has unique implications for these groups. It is therefore important for pediatric psychologists to understand the level of support for prescription privileges among pediatricians. Finally, the majority of the surveys that have been conducted on this topic occurred before prescription privileges were made legal in some locations; it is therefore possible that psychologists' opinions on the topic have changed since these laws began to take effect. The purpose of the present study was to address these gaps in the literature by assessing the opinions of pediatricians and pediatric psychologists about prescription privileges.

Method

Participants

Participants were 213 pediatric psychologists and 119 pediatricians who responded to a survey distributed by mail in 2004 and 2005. Demographic characteristics of the sample are reported in Table 1.

Procedures

After approval by the Texas A&M University Institutional Review Board, two independent surveys were conducted. Four hundred randomly selected members of the Society of Pediatric Psychology (SPP: Division 54 of APA) and 400 randomly selected members of the American Academy of Pediatrics (AAP) were mailed a survey to assess their attitudes about prescription privileges for psychologists. If an incomplete survey was returned because of an undeliverable address, another randomly selected participant was mailed a survey. Each potential participant was mailed a \$1.00 bill as an incentive to participate in the study. These procedures yielded a participation rate of 53.3% among pediatric psychologists ($n = 213$) and 29.8% among pediatricians ($n = 119$).

Table 1. Demographic Characteristics and Response Rate of Sample

	Pediatric psychologists	Pediatricians	Combined
Surveys distributed	400	400	800
Usable surveys returned	213 (53.3%)	119 (29.8%)	332 (41.5%)
Gender (Female%)	106 (52.5%)	69 (59.5%)	175 (55.0%)
Ethnicity			
White/Caucasian (non-Hispanic)	191 (92.3%)	93 (80.2%)	284 (87.9%)
Hispanic/Latino(a)	7 (3.4%)	4 (3.4%)	11 (3.4%)
Black/African American	1 (0.5%)	3 (2.6%)	4 (1.2%)
Asian/Pacific islander	2 (1.0%)	13 (11.2%)	15 (4.6%)
Native American/Alaska native	3 (1.4%)	1 (0.9%)	4 (1.2%)
Other	3 (1.4%)	2 (1.7%)	5 (1.5%)
Community population size			
Less than 500,000	80 (38.8%)	61 (54.5%)	141 (44.3%)
Greater than 500,000	126 (61.2%)	51 (45.5%)	177 (55.7%)
Primary work setting			
Private practice	43 (20.8%)	7 (6.2%)	50 (15.6%)
Group private practice	11 (5.3%)	36 (20.4%)	47 (14.7%)
University	20 (9.7%)	7 (6.2%)	27 (8.4%)
Hospital	54 (25.4)	23 (20.4%)	77 (24.1%)
Other	79 (38.2%)	40 (35.3%)	119 (37.2%)
Mean years since degree (e.g., PhD/MD)	20.9 (8.5)	20.8 (11.7)	20.9 (9.6)

Measures

The items used in the present analyses were part of a larger survey designed to assess opinions about the impact of prescription privileges on the practice of pediatric psychology. The items utilized in the present study focused on items thought to potentially differentiate between the opinions of pediatricians versus pediatric psychologists regarding whether psychologists should have prescription privileges and whether prescription privileges add value to the profession. First, participants from both groups were asked to rate 15 statements reflecting possible opinions about prescription privileges on a 7-point Likert scale ranging from (1) Strongly agree to (7) Strongly disagree. The primary item of interest on the survey (Item 1) was: "If psychologists are trained properly, they should legally be allowed to prescribe psychotropic medications." Additional items followed the Rae (1998) categories of effectiveness (e.g., "Prescription privileges will result in more effective treatment"), accessibility (e.g., "Prescription privileges will result in more access to treatment"), and affordability (e.g., "Prescription privileges will result in less expensive treatment"). In addition, both groups were asked to rate an item on the potential impact of prescription

privileges on the professional relationship between pediatric psychologists and pediatricians ("If psychologists are granted prescription privileges for their child and adolescent patients, it will damage their professional relationship with pediatricians"). Finally, participants in the pediatrician sample responded to the item: "If psychologists are granted prescriptions privileges, I would eagerly collaborate with them."

These opinion items were generated independently by members of a research team consisting of the senior author and four doctoral students in professional psychology. Items were generated based on the conceptualization of value in pediatric psychology by Rae (1998) and on the central research questions of the study. After a consensus process by the research team, items were revised or deleted. These items were then reviewed by two licensed psychologists not involved with development of the items. Opinion items that the two psychologists believed were understandable and appropriate were included in the final survey. The questionnaire items in this first section had good internal consistency for the pediatric psychology, pediatrician, and combined groups as evidenced by α -coefficients of .92, .93, and .93, respectively.

Next, participants were asked to provide information about demographic characteristics (age, gender, and ethnicity), professional characteristics (year professional degree obtained), and practice characteristics (community size, primary work setting, percentage of patients on psychotropic medications). Finally, participants were asked to indicate their beliefs about current medication practices in general, including the percentage of patients they believe are inappropriately prescribed psychotropic medications and the percentage of patients whose psychotropic medications are inappropriately monitored. For the three items in this section involving percentages, participants chose from a range of percentages falling in 10 percent intervals (e.g., < 10%, 11–20%, etc.). As "less than 10%" was the primary response to all three items, they were analyzed as dichotomous variables ("less than 10%" vs. "more than 10%").

Data Analysis Plan

Before initiating the data analyses, the data were examined to determine whether they met the assumptions for the planned analyses. The opinion items were subjected to a principal axis factor analysis to determine whether the survey consisted of a single factor of opinions about prescription privileges or whether the cost, access, and quality items formed separate factors.

The resulting scree plot indicated a single factor best fit the data. This factor explained 50.41% of the variance in the data (Eigenvalue = 7.06). A second factor would have explained 6.93% of the variance (Eigenvalue = 0.97). As mentioned earlier, this single factor had high internal consistency ($\alpha = .93$) and was interpreted as reflecting a global opinion about prescription privileges.

Of the 332 participants, only seven had missing data on the survey opinion items. Participants with missing data were excluded from the analysis of the individual items for which they had missing data. If participants were missing two or fewer scale items, mean imputation was used to retain them for the analyses of the total scale. The two participants missing more than two items were excluded from these analyses as well.

Finally, the distribution of the data was examined. Item 1, the main item of interest (“If psychologists are trained properly, they should legally be allowed to prescribe psychotropic medications”), and several other individual items had negative kurtosis. Examination of histograms of these items indicated that they would be more appropriately analyzed as dichotomous variables, with ratings of 1–3 assigned a value of 1 for “Agree” and ratings of 5–7 assigned a value of 0 for “Disagree” (participants with neutral ratings of 4 were dropped from the individual item analyses). The total scale score was normally distributed, indicating that it could be used as a continuous variable in the analyses. However, as analyses involving the total scale score produced identical patterns of results to those described below for Item 1, the decision was made to only present the analyses for Item 1.

Chi-square analyses were used to assess differences in group characteristics (e.g., demographic characteristics). Tests of group differences in and moderator analyses of opinions about prescription privileges were conducted using logistic regression.

Results

Demographic Differences

First, demographic differences between the two groups were assessed to identify potential confounding variables. The two groups did not differ significantly by gender. Pediatricians were significantly more likely to be ethnic minorities ($n = 26, 21.8\%$) than pediatric psychologists ($n = 22, 10.3\%$; $\chi^2 = 8.19, p < .01$). In subsequent analyses, ethnicity was therefore examined as a potential covariate.

Differences in Professional and Practice Characteristics

Pediatricians and pediatric psychologists did not differ on the year their degree was obtained. Pediatricians were significantly more likely to reside in small communities (population of less than 500,000; $n = 61, 54.5\%$) than pediatric psychologists ($n = 80, 38.8\%$; $\chi^2 = 7.18, p < .01$). Pediatric psychologists were more likely to have >10% of their clients on psychotropic medications ($n = 190, 95.5\%$) than pediatricians ($n = 59, 57.3\%$; $\chi^2 = 68.43, p < .001$). The numbers of clients on medication was also significantly related to ethnicity such that ethnic minority practitioners were less likely to have >10% of their clients on psychotropic medications ($n = 23, 68.4\%$) than Caucasian practitioners ($n = 223, 84.5\%$; $\chi^2 = 5.91, p < .05$); however, group differences were still found when ethnicity was included as a covariate.

Differences in Beliefs about Medication Prescription Practices

As detailed in Table II, pediatric psychologists were more likely to believe that high numbers (>10%) of patients are inappropriately medicated than pediatricians ($\chi^2 = 11.34, p < .01$). They were also marginally, but not significantly, more likely than pediatricians to believe that high numbers of medicated patients are

Table II. Pediatric Psychologists’ and Pediatricians’ Beliefs About Medication Practices

Item	% Psychologists (<i>n</i>)		% Pediatricians (<i>n</i>)		χ^2
	Less than 10%	More than 10%	Less than 10%	More than 10%	
Of the cases of patients/clients who are currently prescribed psychotropic medication, what is the approximate percentage of patients/clients that you feel are inappropriately medicated?	47.4% (93)	52.6% (103)	68.4% (65)	31.6% (30)	11.34**
Of the cases of patients/clients who are currently prescribed psychotropic medication, what is the approximate percentage of patients/clients whose responses to medication you feel are insufficiently monitored?	33.2% (66)	66.8% (133)	43.6% (41)	56.4% (53)	3.01

** $p < .01$.

inappropriately monitored ($\chi^2 = 3.01, p = .08$). Ethnicity was not related to these variables.

Differences in Beliefs about Prescription Privileges

For the logistic regression analyses to examine group differences in Item 1, group membership was coded using pediatricians as the reference group. A chi-square analysis of the relation between ethnicity and this item was not significant, indicating it was not necessary to control for ethnicity in analyses of Item 1. A test comparing a full model predicting responses to Item 1 from group membership to a constant-only model was statistically reliable, $\chi^2(1, N = 310) = 47.77, p < .001$, indicating that group membership reliably distinguished between people who agreed and disagreed with prescription privileges. The full results of this model are presented as Model 1 in Table III. Pediatric psychologists were significantly more likely to agree with Item 1 ($n = 154, 78.2\%$) than pediatricians ($n = 44, 38.9\%$). The odds of disagreeing with prescription privileges were more than five times higher for pediatricians than for pediatric psychologists. This pattern of responses is presented in Figure 1.

Finally, group ratings were compared on items regarding the impact of prescription privileges on the cost of, access to, and quality of treatment. Of the 12 items compared, 10 items indicated significant differences comparing the opinions of pediatric psychologists and pediatricians. Chi-square analyses indicated ethnicity was only related to responses for two items, so the decision was made to run all analyses without ethnicity as a covariate to allow for comparison between items. Percentages of participants agreeing with each item and odds ratios for group differences are presented in Table IV. For the two items that differed by ethnicity, analyses were conducted a second time controlling for

ethnicity; however, inclusion of this covariate did not impact the pattern of results obtained.

Moderators of Beliefs and Group Differences

Next, logistic regression was used to determine whether beliefs about prescription privileges were impacted by practice characteristics and/or beliefs about medications and whether this impact varied as a function of provider type. These analyses were conducted entering group membership, practice characteristics, and interaction terms between group membership and practice characteristics as predictors of ratings. There were no significant main or interaction effects of practice characteristics (degree year, community size, or number of clients on psychotropic medications) on Item 1. There were also no significant main or interaction effects of beliefs about clients being inappropriately medicated. However, there was a significant main effect of the belief that medicated clients are inappropriately monitored on Item 1.

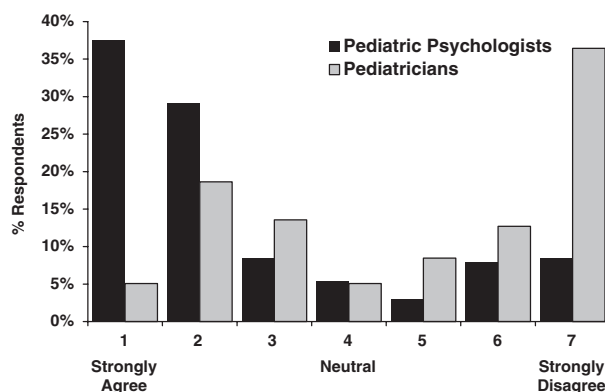


Figure 1. Percent of agreement for pediatric psychologists and for pediatricians with the statement, "If psychologists are trained properly, they should legally be allowed to prescribe psychotropic medications."

Table III. Analyses for Item 1: "If psychologists are trained properly, they should legally be allowed to prescribe psychotropic medications"

Variable	B	Wald test	95% CI for OR		
			OR	Upper	Lower
Model 1: Group differences in agreement with Item 1					
Group membership	1.726	44.467***	5.616	3.382	9.327
Constant	-1.276	54.709***	0.279		
Model 2: Moderator analysis for beliefs about inappropriate medication monitoring					
Group membership	1.819	23.616***	6.163	2.960	12.833
Beliefs about inappropriate medication monitoring	0.914	6.088*	2.494	1.207	5.153
Group × Beliefs	0.024	0.002	1.025	0.321	3.273
Constant	-1.658	46.195***	0.190		

* $p < .05$; *** $p < .001$.

OR, Odds ratio with pediatricians as the reference group.

Table IV. Percentage of Pediatric Psychologists and Pediatricians Who Agreed With Items About the Cost, Access, and Quality of Prescription Privileges

Item	% Agreed Pediatricians (n)	% Agreed Psychologists (n)	OR
Cost			
Prescription privileges will result in less expensive treatment for certain child and adolescent patients.	41.6% (42)	74.2% (121)	2.507**
Prescription privileges will result in more expensive treatment for certain child and adolescent patients.	40.0% (32)	21.5% (38)	0.410**
Access			
Prescription privileges will result in more access to treatment for certain child and adolescent patients.	70.1% (75)	84.1% (164)	2.257**
Prescription privileges will result in psychologists' increased ability to serve a broader range of child and adolescent patients.	66.7% (66)	75.5% (145)	1.543
Prescription privileges will result in less access to treatment for certain child and adolescent patients.	12.5% (11)	80.2% (15)	0.610
Prescription privileges will increase psychologists' ability to provide optimal treatment to underserved child and adolescent populations (e.g., low income, minority).	61.7% (63)	73.5% (139)	1.765*
Quality			
Prescription privileges will result in more effective treatment for certain child and adolescent patients. ^a	51.5% (51)	74.3% (142)	2.727***
Prescription privileges for psychologists will decrease inappropriate medication of certain child and adolescent populations.	18.0% (16)	48.1% (75)	4.225***
Prescription privileges will result in more careful monitoring of psychotropic medications by psychologists as compared to psychiatrists.	19.0% (19)	53.9% (90)	4.893***
Prescription privileges will result in more careful monitoring of psychotropic medications by psychologists as compared to pediatricians. ^a	29.4% (27)	74.9% (143)	7.172***
Prescription privileges for psychologists will increase inappropriate medication of certain child and adolescent populations.	69.5% (66)	32.5% (49)	0.211***
Prescription privileges will result in less effective treatment for certain child and adolescent patients.	50.1% (44)	33.5% (57)	0.493**

^aItem significantly differed by ethnicity.

* $p < .05$; ** $p < .01$; *** $p < .001$.

OR, Odds ratio with pediatricians as the reference group.

The results of this analysis are presented as Model 2 in Table III. For these analyses, participants who believed clients are being inappropriately medicated were used as the reference group. The likelihood of agreeing with Item 1 was 2.494 times higher for participants who did not believe that clients are being inappropriately monitored than those who held this belief.

Impact of Prescription Privileges on Professional Relationships

Finally, ratings on the item “If psychologists are granted prescription privileges for their child and adolescent patients, it will damage their professional relationship with pediatricians” were examined. This item was not related to ethnicity, so it was not included as a covariate in analyses of this item. Twenty-nine percent of pediatricians ($n = 24$) and 34.8% of pediatric

psychologists ($n = 63$) agreed with this statement. These rates did not differ significantly ($OR = 1.312$; $p > .05$). Pediatricians also rated the item “If psychologists are granted prescription privileges, I would eagerly collaborate with them.” The majority (62.9%; $n = 56$) agreed with this statement.

Discussion

The purpose of this study was to examine the opinions of pediatricians and pediatric psychologists regarding prescription privileges for psychologists. Overall, the pediatric psychologists surveyed expressed significantly more positive opinions of prescription privileges than pediatricians. This finding is consistent with previous surveys in which psychologists have been neutral or positive

(Sammons et al., 2000; Walters, 2001) and with the AMA's statement against prescription privileges for psychologists (H-345.989 Psychologist Prescribing, 2007). This finding was exemplified by the response to Item 1 ("If psychologists are trained properly, they should be allowed to prescribe psychotropic medications,"), as well as the mean rating across all questionnaire items.

Pediatric psychologists were significantly more likely than pediatricians to agree that prescription privileges will result in less costly and higher quality treatment, a commonly cited reason for support for prescription privileges (DeNelsky, 1991; De Leon & DeNelsky, 1993; DeLeon & Wiggins, 1996). There were, however, few differences in pediatric psychologists' and pediatricians' opinions regarding access to care. Though most pediatricians surveyed expressed negative opinions regarding prescription privileges, the majority also did not believe that prescription privileges would damage their professional relationship with psychologists. At the same time, the survey also showed that while a majority of respondents (62.9%) endorsed that they would eagerly collaborate with psychologists if they were granted prescription privileges, a number of pediatricians (37.1%) endorsed that they would not.

Practice characteristics and beliefs about medication practices were examined as potential moderators of beliefs about prescription privileges. Practice characteristics (community size, degree year, and number of clients on psychotropic medications) had no moderating effect on beliefs. Participants' beliefs about clients being inappropriately medicated also had no effect. Beliefs about the inappropriate monitoring of medicated clients did, however, have a main (but not moderating) effect, such that participants were more likely to disagree with prescription privileges if they believed that medicated clients are being appropriately monitored.

There were several limitations of the current study that must be considered when interpreting these results. The response rate was different for the two groups, with only 29.9% of pediatricians responding to the survey, compared to 53.3% of pediatric psychologists. This may stem from the fact that the issue of prescription privileges is of higher interest to psychologists than to pediatricians. Also, psychologists might be more predisposed to respond to a research questionnaire since training in research is more of a tradition in psychology as compared to pediatrics. At the same time, the pediatricians who did respond to the survey may have had stronger feelings about this issue than the average pediatrician.

The pediatric psychology and pediatrician groups were also not equivalent in community size. A larger proportion of the pediatricians worked in smaller communities than the pediatric psychologists. One suspects that because pediatrics is a primary care field, pediatricians can practice in a community of almost any size, while the more specialized practice of pediatric psychology would for the most part take place in larger communities. It is also possible that the issue of prescription privileges is more salient to pediatricians working in smaller communities, making it more likely that these providers would respond to the survey. Regardless, community size was not found to be a moderator of beliefs about prescription privileges, indicating that this difference likely did not substantially impact the pattern of results obtained. Pediatricians also had significantly fewer clients on psychotropic medications, not surprising given that psychologists work primarily with a mental health population, whereas pediatricians work with a wider variety of patients. As with community size, however, this variable was not found to moderate beliefs, indicating it also did not likely impact the results obtained.

The pediatric psychologists were also less ethnically diverse than the pediatricians, with 92.3% of pediatric psychologists and 80.2% of pediatricians reporting ethnicity as "White/Caucasian." When ethnicity was examined as a covariate in the analyses, however, this variable did not appear to significantly impact the study findings. While ethnicity was not found to be significantly related to most study variables, we did find that provider ethnicity was significantly related to the percentage of clients on psychotropic medications. Given the data suggesting that psychotropic medications may be viewed less positively by Hispanics and African Americans than by Caucasians (Miranda & Cooper, 2004; Cooper et al., 2003), it is possible that these findings reflect cultural differences in providers' willingness to prescribe or recommend psychotropic medications to their patients or clients. If this is the case, then it is possible that the pediatrician sample had a more negative view of psychotropic medications in general than the pediatric psychologists. However, given that ethnicity was not related to opinions about prescription privileges, it is unlikely that these ethnic differences had a significant impact on our study findings.

Another limitation of the study is that this survey did not assess the pediatricians' quantity and quality of their collaborative relationships with pediatric psychologists; given that these relationships may impact opinions about prescription privileges, it would be useful to include such

questions in future studies on this topic. Finally, traditional survey methods may not be sensitive to some of the opinion differences between pediatricians and pediatric psychologists. The two professional groups may have different preconceptions of the paradigm of prescription privileges (e.g., level of prescribing independence, models of training), which may account for the different responses between the pediatricians and pediatric psychologists.

Despite these limitations, however, this study had several strengths that make it an important contribution to the existing literature on prescription privileges. First, this survey was the first to include pediatricians. The opinions of physician groups have not been studied, yet if prescription privileges do occur, physicians' opinions would be very important since this would change the nature of their relationship with psychologists. Second, this study investigated responses to items falling within specific domains thought to be theoretically related to the perceived value of psychological services (Rae, 1998) and examined moderators of beliefs, shedding a more in-depth look at provider opinions than many previous studies. Third, the participants were anonymously surveyed via a random sample, helping eliminate systematic bias in the sampling. Finally, the present survey was administered after policies regarding prescription privileges began to be passed, indicating these results may be more reflective of the current state of opinions regarding prescription privileges than many prior studies. Future studies investigating opinions of providers who have specifically been impacted by these policies are an important next step in this line of research.

The current study is consistent with existing literature regarding psychologists' opinions in that it shows support for prescription privileges by pediatric psychologists. While there is a growing body of literature exploring opinions and attitudes about granting psychologists prescription privileges, there are very few studies that include the opinion of physicians. The current study shows clear differences between the opinions of pediatric psychologists and pediatric physicians, two health professions that stand to be greatly impacted by psychologists gaining prescription privileges. As pediatricians regularly collaborate with pediatric psychologists, their relatively negative opinions about prescription privileges cannot be ignored. The survey found that a small portion of pediatricians (37.1%) may not desire eager collaboration if prescription privileges are granted. Despite the fact that the two professions have historically complemented

each other, the present findings suggest that prescription privileges could contribute to an erosion of trust between the two professions if this issue is not handled with great care. It is hoped that the findings in this study might alert pediatric psychologists to the importance of continued communication with pediatricians about prescription privileges, in order to avoid any misperceptions. Continued collaborative activities with pediatricians (e.g., joint rounds) with a focus on how pediatric psychologists can contribute to medication management would also be helpful. Finally, psychology professional organizations (e.g., Society of Pediatric Psychology) should proactively reach out to pediatrician professional organizations (e.g., American Academy of Pediatrics) on prescription privileges with the goal of reducing any negative inter-professional impact.

Conflict of interest: None declared.

Received February 1, 2007; revisions received July 23, 2007; accepted July 30, 2007

References

- Bush, J. W. (2002). Prescribing privileges: Grail for some practitioners, potential calamity for interprofessional collaboration in mental health. *Journal of Clinical Psychology, 58*, 681–696.
- Chatel, D. M., Lamberty, G. J., & Bieliauskas, L. (1993). Prescription privileges for psychologists: A professional affairs committee survey of Division 40 members. *Clinical Neuropsychologist, 7*, 190–196.
- Cooper, L. A., Gonzales, J. J., Gallo, J. J., Rost, K. M., Meredith, L. S., Rubenstein, L. V., et al. (2003). The acceptability of treatment for depression among African-American, Hispanic, and white primary care patients. *Medical Care, 41*(4), 479–489.
- Daw, J. (2002). Steady and strong progress in the push for Rx privileges. *Monitor on Psychology, 33*, 56–58.
- DeLeon, E., & DeNelsky, G. Y. (1993). The prescription privileges debate: Will privileges advance psychology? *The National Psychologist, 2*, 12–13.
- DeLeon, E., & Wiggins, J. (1996). Prescription privileges for psychologists. *American Psychologist, 51*(3), 225–229.
- DeNelsky, G. Y. (1991). Prescription privileges for psychologists: The case against. *Professional psychology: Research and Practice, 22*(3), 188–193.
- Drotar, D. (1995). *Consulting with pediatricians: Psychological perspectives*. New York: Plenum Press.

- DuPaul, G. J., McGoey, K. E., & Mautone, J. A. (2003). Pediatric pharmacology and psychopharmacology. In M. C. Roberts (Ed.), *Handbook of pediatric psychology* (3rd ed., pp. 234–250). New York: Guilford.
- Fagan, T. J., Ax, R. K., Liss, M., Resnick, R. J., & Moody, S. (2007). Prescriptive authority and preferences for training. *Professional Psychology: Research and Practice*, 38(1), 104–111.
- Goode, E., (2002). *Psychologists get prescription pads and furor erupts*. (pp. D1, D4). New York Times.
- H-345.989 Psychologist Prescribing. (n.d.) Retrieved February 1, 2007 from http://www.ama-assn.org/apps/pf_new/pf_online?f_n=browse&doc=policyfiles/HnE/H-345.989.HTM
- Long, J. E. Jr (2005). Power to prescribe: The debate over prescription privileges for psychologists and the legal issues implicated. *Law and Psychology Review*, 29, 243–260.
- Miranda, J., & Cooper, L. A. (2004). Disparities in care for depression among primary care patients. *Journal of General Internal Medicine*, 19(2), 120–126.
- Olfson, M., Marcus, S. C., Druss, B., & Pincus, H. A. (2002). National trends in the use of out patient psychotherapy. *American Journal of Psychiatry*, 159, 1914–1920.
- Plante, T. G., Boccaccini, M., & Andersen, E. (1998). Attitudes concerning professional issues impacting psychotherapy practice among members of the American Board of Professional Psychology. *Psychotherapy*, 35, 34–42.
- Rae, W. A. (1998). Back to the future in pediatric psychology: Promoting effective, accessible, and affordable interventions. *Journal of Pediatric Psychology*, 23, 393–399.
- Sammons, M. T., Gorny, S. W., Zinner, E. S., & Allen, R. P. (2000). Prescriptive authority for psychologists: A consensus of support. *Professional Psychology: Research and Practice*, 31(6), 604–609.
- Walters, G. D. (2001). A meta-analysis of opinion data on the prescription privilege debate. *Canadian Psychology*, 42, 119–125.
- Williams, C. (2000). Prescription privileges fact sheet: What students should know about the APA's pursuit of prescription privileges for psychologists. APAGS Newsletter. (Available online at www.apa.org)