Factors Influencing Plastic Surgeons When Selecting New Colleagues

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Abstract

Introduction: As plastic surgeons are continuing to form larger groups, it is essential to select candidates who will contribute to a positive work environment. This article shows which traits may be the most valuable when selecting candidates and in which ways a selection committee may want to focus their search. **Methods:** For the study, the Canadian Society of Plastic Surgeons' members answered a survey containing questions about demographics, the factors which influence the selection process, and their hiring experiences. Responses were separated and compared in groups based on gender, practice type, group size, and years practising. Significance was established if $P < .05$ using the χ^2 test. **Results:** The most and least important factors regarding hiring a new group member were established. Statistically significant results were obtained between several different factors, including hiring a non-Canadian, the importance of the candidate's professional reputation, the number of publications by the candidate, and the presence or absence of program director letters. A majority (54%) of society members regret having hired a candidate, with the vast majority of these (75%) indicating personality and work ethic issues as opposite to professional skills as the uncomplimentary feature. **Conclusion:** This study has identified the key features which influence hiring new candidates. The need to develop a more efficient hiring process has been identified and has highlighted the difficulty faced by Canadian plastic surgery groups when recruiting new members.

Keywords

recruitment, employment, attributes, hiring

Plastic surgeons are increasingly working in larger groups, with solo practice being replaced by the perceived greater stability of a group practice.¹⁻³ While this practice may vary in size from a couple to the low teens, many factors need to be considered when forming the group. This includes sharing physical space in an office, sharing hospital or clinic resources, or university commitments.⁴

In the past few years, residency programs have started to standardize the selection process for picking new residents.⁵⁻⁸ Most of these started by identifying the specific traits particular to a specialty, as well as those that may preclude someone from being selected. Although most are early in the development of such a selection method, it seems most are happy with how this change has helped narrow down the sometimes overwhelming field of candidates. However, there are still a high percentage of residents who end up on academic probation or terminated from their programs.^{7,8}

Residency programs, by having a fixed time limit, create a relatively quick turnover period. This allows for poor resident selections, especially those related to personality issues, to be tolerated for the defined period of time. However, while the turnover in a residency program is dictated mostly by the

relatively short residency period, the implications of selecting an uncomplimentary member to join a professional group can last much longer. In addition to personality issues, professional and financial impact is inevitable.

In the past 10 years in Canada, there has been an annual increase in the number of plastic surgery residents finishing their training.^{9,10} This also coincides with a ruling by the Supreme Court of Canada¹¹ throwing out mandatory retirement ages for doctors in most cases. This collusion of factors has led to a more competitive market when applying for jobs, requiring selection committees to review many more applicants than in the past. This effective surplus of qualified candidates allows programs to have greater say in who is hired. However, there is a subsequent need to better identify the specific traits that are most important for a group.

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Unlike in residency selection,^{12,13} there are currently no papers in the plastic surgery literature that look at the traits that plastic surgeons look for when hiring a new group member. We set out to identify which parts of an application are seen as the most important and which areas a selection committee needs to develop ways to focus their search.

Methods and Participants

Members of the Canadian Society of Plastic Surgeons with an up-to-date e-mail address were contacted and asked to complete an online survey. Each was sent an e-mail invitation to the study posted on SurveyMonkey, as well as 3 reminders spaced 1 week apart. After 1 month, the study was closed. The survey incorporated demographic questions, the importance of specific factors when selecting a candidate, and their experiences with hiring members for their practice. The respondents were separated into groups based on gender, the size of their practice group, their type of practice, and their time as practising plastic surgeons.

Questions were designed by literature review^{12,13} and a focus group of 5 plastic surgeons. Questions were then created and placed in the online program: "SurveyMonkey." The same focus group then performed the test, providing feedback as to the ease and clarity of the survey. Questions deemed redundant were removed and others were clarified as required.

Whenever possible, "Yes or No" questions were asked. Other questions asked for a graded level of importance. To simplify calculations, the responses were standardized on a scale, where 0 indicates the factor has no importance and 4 indicates that the factor is essential when selecting candidates. All sample responses were pooled and analyzed together as well as in groups. Differences or trends between treatments were observed. Statistical significance was established only if $P < .05$, using the χ^2 test.

Results

The e-mail addresses of 405 of the 421 members of the Canadian Society of Plastic Surgeons were available. In total, 179 responded to the survey, representing 44% of the members initially contacted, or 43% of total membership.

The gender response rate matched the overall membership of the society (83% male vs 17% female). Respondents were also separated based on years in practice. This response rate closely reflected the overall society membership, though with slightly higher representation within the group with less than 10 years in practice (Table 1).

It was also found that 54% of the respondents are in community practice versus 46% in academic practice. The overall distribution within the society is not defined. Of the respondents, 57% work in a group of 5 or less members.

Table 1. Canadian College of Plastic Surgeon Demographics in Comparison to Survey Demographics.

Response	Survey Respondent Demographics	CSPS Demographics
Gender		
Men	146 (82%)	348 (83%)
Women	32 (18%)	73 (17%)
Type of practice		
Academic	82 (47%)	
Community	94 (53%)	
Group size		
≤5 members	101 (57%)	
>5 members	75 (43%)	
Years practising		
≤10 years	64 (36%)	117 (29%)
10-20 years	42 (24%)	114 (28%)
>20 years	70 (40%)	180 (44%)

CSPS: Canadian Society of Plastic Surgeons

Most Important Factors

The factors which ranked in the top 25th percentile based on their mean importance were chosen as the main factors when selecting candidates. On the scale used, this corresponds to a factor's mean importance averaging more than 3. The factors by increasing importance are the following: the candidate's appearance during the interview, negative unsolicited letters were received regarding the candidate, the candidate's fellowship is specific to the job posted, the candidate's personal reputation is well regarded among Operating Room (OR) and ward staff, the candidate's professional reputation is well regarded among OR and ward staff, the candidate's personal reputation is well regarded among their peers, the candidate's professional reputation is well regarded among their peers, and an in person interview was conducted (Figure 1).

Least Important Factors

The factors which ranked in the bottom 25th percentile based on their mean importance were chosen as the most insignificant factors when selecting candidates. On the scale used, this corresponds to a factor's mean importance averaging less than 2. The least important factors by increasing importance are the following: the candidate completed their residency at the nearest training group, the candidate attended a local university for their MD training, the candidate grew up in the area, the candidate volunteered on medical missions, the candidate's referee is a "famous" plastic surgeon, the candidate's non-MD-related work experience, the candidate's spouse is already employed in the area, the candidate trained with the group, and the candidate holds additional degrees (Figure 2).

Yes-No Responses

The results from the yes-no questions are as follows: 63% of respondents would select a candidate who has taken more than

Figure 1. Most important factors when selecting candidates.

Figure 2. Least important factors when selecting candidates.

Table 2. Yes–No Question Results.

Response	Would Hire Candidate if Taken Multiple Attempts at the Royal College Exam	Respondents Who Conduct Structured Interviews	Would Hire a Non-Canadian
Yes	91 (63%)	78 (54%)	96 (68%)
No	53 (37%)	66 (46%)	45 (32%)
Total	144 (100%)	144 (100%)	141 (100%)

one attempt at passing the Royal College exam, 54% of respondents conduct structured interviews, and 68% of respondents would consider hiring a non-Canadian (Table 2). A total of 54% of respondents have regretted hiring someone. This is more common in academic and/or larger groups. Of the respondents who regret hiring a candidate, 36% say the recruit has poor relationship skills with other surgeons, 31% say the recruit always creates administrative problems or complaints, 25% say the recruit lacks skills or clinical judgment, while the remaining 8% say the recruit has poor relationship skills with nurses or support staff or is unwilling to share in nonclinical activities (Figure 3).

Statistical Differences Between Groups

More women than men were likely to identify extended time since the completion of training, being non-Canadian, and

one's poor professional reputation as important negative factors when hiring. Academic groups and larger groups (greater than 5 members) valued higher degrees, number of publications on a Curriculum Vitae (CV), and type, location, and duration of fellowship training more than community surgeons or those in smaller groups. They were also more likely to have regretted the hiring of a colleague.

For practice experience, those with less than 20 years of experience valued the presence or absence of program director letters more than those with greater than 20 years of experience. There was also a greater emphasis placed on personal reputation among this group. Finally, people with less work experience were more interested in whether a candidate had worked or trained with the group (Table 3).

Discussion

This study had a response rate of 44%. Thoma et al describe a response rate of 60% to 70% as broadly applicable. They further describe how online studies have been shown to have lower response rates versus mail-in surveys. This study did employ multiple methods, including multiple reminder e-mails, in an attempt to increase response numbers. The limited time frame allotted for response (1 month) may have reduced the total number of respondents. However, given the close comparison in demographic characteristics between

Figure 3. Proportion of respondents who regret hiring a colleague and the predominant reasons.

Table 3. Chi-Square Test Results Between Different Groups for Significant Values Only.^a

Response	Gender	Practice Type	Group Size (Members)	Time Practicing (Years)		
	Male vs Female	Academic vs Community	≤5 vs >5	≤10 vs 10-20	≤10 vs >20	10-20 vs >20
Time past since residency	0.0198					
Specificity of fellowship to job posted		0.0002	0.0013			
Duration of fellowships		0.0053			0.0410	0.0452
Institution where fellowship completed				0.0352		0.080
Trained with the group					0.0207	
Worked with group as a locum				0.0402		
Professional reputation among OR and ward staff	0.0235					
Personal reputation among peers				0.0384	0.0241	
Published articles on their CV		<0.0001	0.0077			
Additional degrees		<0.0001	0.0040			
Letter of reference received from program director				0.0114	0.0214	
No letter of reference received from program director				0.0114	0.0034	
More than one attempt at the Royal College Exam				0.0025	<0.0001	0.0088
Conduct structured interviews			0.0478			
Hire non-Canadians	0.0064					
Regretted hiring a candidate		0.0097	0.0005			

^aStatistical significance established if $P < .05$. OR: Operating Room. CV: Curriculum Vitae.

the Canadian Society of Plastic Surgeons as a whole and the group of respondents, we believe the study results are broadly applicable.

The most significant finding in this study is the large number of society members who have hired someone they regret. Although 97 (54%) of 179 responders had such a regret, this number does not reflect the number of total surgeons who are difficult to work with, as a group of 10 with one poor hire will skew the number directly. Likely, this reflects a small number of “bad apples” but underscores the significant effect a bad hire can have on a group. The vast majority of these (75%) identified personality and work ethic issues as opposed to clinical skills or judgment as the regrettable trait. A study by Ferron et al¹⁴ showed that the majority of Canadian plastic surgery graduates have the correct skill set and clinical exposure to enter the work force upon graduating. Although this is largely self-assessed, more effort is being made to obtain appropriate exposure levels for trainees, giving program directors a better

sense of ability when signing off on a final assessment. The predominant negative traits that are related to surgeons regretting a new hire are the new surgeon being an administrative problem or having poor relationship skills with the other group members. These are traits that should be identified through proper vetting of candidates.

Indeed, many articles that deal with recruitment¹⁵⁻¹⁸ highlight the need for proper background assessment of candidates. This is especially important for nonclinical skill sets. The theme running through these papers indicate 3 C’s when recruiting and hiring: compatibility, competence, and communication. Compatibility relates not only to personality but also to the applicant buying into the professional and personal environment at the workplace.

This finding suggests that groups should consider long-term locums or defined time contracts when adding new members to the group. Although long-term locums are becoming more common, short-term contracts for staff positions pose problems

with hospital credentialing and the eagerness of a new recruit to invest heavily in office and practice building. It is important therefore to try to identify the attributes that seem most and least important when hiring, in order to construct an appropriate and adequate evaluation process.

Top Factors

When the top 9 factors are considered, the interview is seen as the most important part of the process and that it is equally important to conduct those interviews in person. This corresponds to findings in studies focussing on resident selection that have shown a similar bias toward interview performance when selecting a candidate.⁵⁻⁸ This is undoubtedly the most stressful portion of the application for the applicant, and it is evident that group members value this as the most important overall part of the process. Interestingly though, only 54% of all respondents said that their groups conduct a structured interview, with groups of greater than 5 members more likely to use them than smaller groups ($P < .048$). Many papers^{5,6,19,20} suggest that a great deal of time is wasted by unstructured interviews and that vital information can be overlooked or ignored in this process. This is quite often the final time for a committee to be swayed one way or the other, and in the absence of structured, standardized interviews, it is hard to rack the candidates based on their responses.

Both personal and professional reputation are seen as a key factor when hiring. This was most likely in people with less than 20 years of work experience. In addition, women valued professional reputation much more highly than their male colleagues ($P < .0024$). The Canadian plastic surgery training programs are centered at 10 English-speaking and 3 French-speaking major universities, and currently, there are approximately 20 to 25 residents per year being trained through this system. This small community creates an environment where reputations travel quickly and most large groups will have a close connection to someone in each training program. As a result, knowledge of the referee is seen as a very important factor in the selection process, though less significant than negative feedback unsolicited by the applicant. This feedback is generated by not only reference checking but also by discussion among colleagues at different sites. As a result, it is more difficult to hide character issues behind 1 or 2 good references in this community of surgeons.

Liang et al¹³ showed that when selecting residents, program directors favoured letters from other program directors over all other letters of reference. Our study also showed this level of preference among practitioners with less than 20 years of experience. Both the presence and absence of a letter of recommendation from a program director was seen as significant. This highlights the importance of the close relationship developed between trainee and program director as a key hiring factor. The lack of a letter from one's program director can create a negative interpretation of the candidate, which speaks as much as or more than a positive reference.

Not surprisingly, the specificity, institution and duration of fellowship training, is also seen as significantly more important in academic versus community groups. Recent studies²¹ have supported this in the United States at the graduate level when applying for academic staff positions. These studies reflect the high level of specialization required at university settings versus those in the community and are not surprising. However, this specificity of training may lead to a reduced field of qualified applicants and therefore increase the possibility of personal or professional conflicts.

Given the small Canadian plastic surgery community, most referees are known to some degree. This is likely why a reference from a famous plastic surgeon is not seen as a specifically beneficial factor. Interestingly, 2 of the least important factors related to where the person trained. This seems to conflict with the high consideration given to the personal and professional reputation of the applicant. In addition, program directors have indicated that personal experience with an applicant at that site is an important factor when determining residency positions.^{5,7,8,13} This likely reflects the ability to form a solid reputation, either negative or positive, over the 5-year residency versus the very short period of time spent on relevant rotations in medical school. One group that saw experience working with the group as a significant variable was in people with less than 10 years of experience ($P < .04$).

Time Since Training

In this study, there was a significant difference between men and women when asked about whether time since completion of training mattered when selecting a candidate. Women were more likely to identify this as a significant variable. This question tried to address people coming from other jobs, either full time or locum, and indicates that women are more interested in someone fresh from training versus someone from another site with practice experience. This preference for recently trained graduates combined with the importance of professional reputation may speak to the difficulty women have had breaking into surgical fields. It did not address maternity leave as a specific variable.

Many women members, especially those with more experience, would have had to consider time off for having children as a potentially negative career decision, especially when first starting a job or immediately after training. However, there was no statistical difference between women based on years of experience in this study.

Both Canadian citizenship and one's past performance on the Royal College fellowship exam showed significant importance in the selection of candidates. Canada, like many countries, requires certain work visas to be granted only when there are no qualified Canadian candidates. This is likely the reason why many surgeons would exclude non-Canadians to fill positions.

The reluctance of people to hire candidates who had previously failed an exam is interesting. In Canada, plastic surgeons cannot be licensed to practice without passing this exam. There

is no board-eligible status in Canada. Therefore, the performance on this exam is a career defining moment. Current guidelines allow a person to write the exam up to 3 times.

Given the small size of the Canadian plastic surgery community and the relatively low fail rate among Canadians trained in Canada, the identity of those who fail the exam is generally known outside of the person's program. This leads to 2 possible reasons why failing the exam at some point is a significant barrier to some jobs: it is being used as an easily defined point to exclude a candidate and narrow down an applicant pool or it reflects poorly on one's knowledge and clinical judgment despite subsequently passing the exam. This finding will undoubtedly place greater pressure on exam candidates to pass the first time.

The study is limited by a low response rate, which could be improved by a longer survey period. In addition, certain important recruitment and employment factors, such as time off for maternity leave or disability, were not addressed.

This study has highlighted the difficulty in recruiting faced by Canadian plastic surgery groups. It has identified key factors to consider when hiring and factors seen as deal breakers by many people. It has identified the need to better develop the hiring process so as to make the process more efficient and more likely to yield a satisfactory match for both sides.²²

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