

ORIGINAL ARTICLE Education

The Role of ChatGPT in Personal Statements for Plastic Surgery Residency Applications: Program Directors' Perspective

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Background: Personal statements are a required component of plastic surgery residency applications but can be extremely time- and labor-intensive. Artificial intelligence (AI) programs like ChatGPT can streamline personal statement writing, but their use, especially if undisclosed, can have ethical implications. This study elucidates the perspective of plastic surgery residency program directors (PDs) regarding the importance of personal statements in reviewing applicants and whether ChatGPT should be utilized.

Methods: An anonymous, 6-question multiple-choice survey was designed and administered in 3 rounds via REDCap to 120 current plastic surgery residency PDs. An additional email reminder was administered by the principal investigator. Data was collected and reported in aggregate.

Results: The survey response rate was 28.6%. Most PDs (73.5%) reported that personal statements were somewhat important in determining interviewees and the rank list; 85.3% of PDs were not confident in their ability to determine if ChatGPT was utilized. Additionally, 85.3% of residencies reported not utilizing AI-detection software, although 11.8% plan to implement one. Only 8.8% of PDs believed ChatGPT use to be ethically appropriate in all aspects of personal statement creation, whereas others believed it was only appropriate for brainstorming (11.8%), editing (14.7%), or writing (5.9%). Finally, 58.8% of PDs believed ChatGPT use to be unethical in all parts of personal statement creation.

Conclusions: The utilization of AI could have a profound impact on streamlining personal statement creation, but its use has many ethical implications. Currently, the majority of surveyed PDs feel the use of ChatGPT to be unethical in any form during personal statement writing. (*Plast Reconstr Surg Glob Open 2025;13:e6698; doi:* 10.1097/GOX.0000000006698; Published online 16 April 2025.)

INTRODUCTION

Although the exact origin of personal statements is difficult to elucidate, their use in applications for higher education is commonplace, especially in health care.¹ Personal statements allow for free text and enable candidates the ability to showcase their life stories and highlight

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Copyright © 2025 The Authors. Published by Wolters Kluwer Health, Inc. on behalf of The American Society of Plastic Surgeons. This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal. DOI: 10.1097/GOX.00000000006698 attributes that are otherwise obscure or unidentifiable in other aspects of their application.

The personal statement is a required component of the Electronic Residency Application Service and the Plastic Surgery Central Application and allows programs to gain additional insight into a candidate's personality, journey, attention to detail, communication skills, and commitment to a program and overall specialty.^{2,3} No current article describes the importance, or lack thereof, of personal statements in the determination of plastic surgery applicant interview or rank order determination, but contemporary literature demonstrates that 80% of orthopedic surgery applicants believe the personal statement is a crucial part of their application.⁴ Furthermore, the National Resident Matching Program Program Director Survey in 2021 demonstrated that 83.8% of residency directors across all specialties utilize the personal statement with an importance rating of 3.9 out of 5 when deciding whom to interview.⁵ Despite this,

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studies have demonstrated significant inter-reviewer discrepancies regarding what constitutes a quality personal statement, which questions the validity of using the personal statement as a partial surrogate for interview extension to applicants.⁶

As an open-ended component of the application process, crafting a personal statement proves to be a daunting task for many medical students and is associated with significant stress and anxiety.⁷ This has prompted prospective applicants to seek out for-hire writers or editing services that are often expensive and pose ethical issues including concerns for plagiarism, inaccurate portrayal of an applicant's attributes, and financial inequity.⁸

The recent development and integration of text-based artificial intelligence (AI) programs have caused significant turmoil in the academic community. ChatGPT is one such freely accessible model developed by the company "OpenAI" in November 2022. It has attracted more than 173 million users within 6 months, making it the fastest growing consumer application to date.⁹ The versatility of ChatGPT is immense and ranges from information extraction, data analysis, and creative/scientific writing assistance.^{10,11}

Unsurprisingly, the use of AI programs such as ChatGPT in personal statement writing confers many potential benefits. ChatGPT can significantly reduce the immense labor and time burden associated with the multiple stages of personal statement creation (eg. brainstorming, outlining, writing, and revising) without compromising content quality.8 Special adjustments can also alter the text's tone, writing style, and content within minutes.^{11,12} This freely available technology can possibly make the plastic surgery residency application process more equitable for applicants for whom English is a second language or those who cannot afford expensive editing services compared with their more financially well-off peers. Recent survey data from 2020 and 2021 suggests that the average plastic surgery applicant's expenses will total over \$10,000 throughout the application cycle, further highlighting the financial strain, intrinsic bias, and socioeconomic inequities inherent in the plastic surgery residency match.^{3,13–16} Despite the many theoretical benefits, data regarding the extent of AI use in residency applications are limited, although a recent study polling medical students reported that 48.9% of respondents utilized ChatGPT to aid their medical education.¹⁷ This article explores the collective viewpoint of plastic surgery residency program directors (PDs) on the use of AI technology such as ChatGPT for personal statement writing and the overall importance of personal statements in the determination of interview invitations and subsequently rank order during the match process.

METHODS

After approval by the institutional review board, a 6-question multiple-choice REDCap-based survey (Fig. 1) was designed to gain insight into the current impact of

Takeaways

Question: What role do plastic surgery residency program directors (PDs) believe ChatGPT should have in personal statement creation?

Findings: On surveying, nearly 75% of program directors believe personal statements are somewhat important when determining interviewees and the rank list, and over half (58.8%) believe ChatGPT use in any manner to be unethical in personal statement creation.

Meaning: Although ChatGPT can streamline writing, its use poses ethical implications for the applicant and is deemed inappropriate and unacceptable by the plastic surgery admissions committee.

personal statements in plastic surgery residency interview and/or rank order determination and what role (if any) should ChatGPT have in personal statement writing. The names and email addresses of current PDs for both integrated and independent plastic surgery programs were obtained by cross-referencing the American Society of Plastic Surgeons website,¹⁸ individual residency program webpages, and a residency program list obtained from the Accreditation Council for Graduate Medical Education, yielding emails for 120 PDs. These emails were tabulated into a mailing list using Microsoft Excel and uploaded into REDCap. The survey was initially distributed to all identified PDs in July 2024, and 2 subsequent reminder emails were sent at 1-week intervals following the initial distribution date. Following this, an additional reminder was sent out 1 week afterward by the senior author of this study (J.E.J.). All 4 rounds of the survey were in accordance with the previously determined and institutional review board-approved study design. Survey responses were anonymous and reviewed only in aggregate. The categorical data obtained from REDCap were then analyzed and represented as percentages.

RESULTS

The 6-question survey was sent to 120 PDs but was undeliverable to 1 PD after 4 rounds and was completed by 34 (34 of 119 = response rate 28.6%). All PDs reported they spent time reviewing personal statements, although this time varied by respondent. Overall, PDs reported spending less than 5 minutes (n = 18, 52.9%), 5–10 minutes (n = 12, 35.3%), 11–15 minutes (n = 3, 8.8%), and more than 15 minutes (n = 1, 2.9%) reviewing personal statements. In the determination of who to interview and/ or rank, PDs believed personal statements are not important (n = 6, 17.6%), somewhat important (n = 25, 73.5%), and very important (n = 3, 8.8%).

Of the 34 responding PDs, 21 (61.8%) have previously utilized ChatGPT and 13 (38.2%) have not. After reading a personal statement, 85.3% (n = 29) of the PDs are not confident that they can determine if ChatGPT was utilized in personal statement writing simply by reading it. No PDs were very confident (n = 0), although 14.7% (n = 5) were somewhat confident in their ability to detect the use of

1)	How long do you currently spend reviewing a personal statement for each plastic surgery applicant?	 No time Less than 5 minutes 5-10 minutes 10-15 minutes More than 15 minutes
2)	How important do you believe the personal statement is in determining who to interview and/or rank?	 Not important Somewhat important Very important
3)	Have you utilized ChatGPT before?	 ○ Yes ○ No ○ Unsure
4)	How confident are you in determining whether ChatGPT was used to write a personal statement simply by reading it?	 Not confident Somewhat confident Very confident
5)	Does your program currently utilize AI -detection software to identify whether ChatGPT has been used to write the personal statement?	 No Yes Not yet, but will in the future Unsure
6)	Use of ChatGPT in what aspect of the personal statement creation process do you believe is ethical?	 Should not be used at all Brainstorming only Editing only Writing only All aspects of personal statement creation

Fig. 1. A 6-question survey that was administered to plastic surgery residency PDs anonymously via REDCap.

ChatGPT. Of those surveyed, 85.3% (29) of the residency programs reported not currently utilizing AI-detection software for the detection of ChatGPT use in personal statement writing, although 1 (2.9%) PD was unsure and 4 (11.8%) reported that they will utilize this software in the future. Three (8.8%) PDs believed the use of ChatGPT to be ethically appropriate in all aspects of personal statement creation, whereas others believed it was appropriate for brainstorming only (n = 4, 11.8%), editing only (n = 5, 14.7%), and writing only (n = 2, 5.9%). However, 58.8% of PDs (n = 20) believed the use of ChatGPT to be unethical in any matter during the creation process of the personal statement. All data are tabulated in Table 1.

DISCUSSION

The Plastic Surgery Central Application, and to a much lesser extent Electronic Residency Application Service, currently serves as a gateway for medical students to apply for plastic surgery residencies in the United States.¹⁹ Among the many application requirements, the personal statement confers a unique opportunity for candidates to showcase their personality, values, and inspiration for pursuing a specific specialty. Residency programs can utilize personal statements to assess an applicant's character and life story and possibly receive explanations of any extenuating circumstances that are not accounted for in other parts of the application.

The emphasis on personal statements in applicant interview invitations and match ranking varies based

on specialty and even between individual programs.^{7,20} Despite objective scores involving USMLE step 1 (now pass/fail) and step 2 still ranking higher in importance in determining interviewees,^{21–24} nearly 85% of applicants still feel anxious about writing their personal statements and can spend upward to 15 hours finalizing their drafts.^{4,20,25} Interestingly, however, most PDs we surveyed reported spending less than 5 minutes reading the personal statement, with 73.5% believing it is somewhat important and 8.8% stating it is not important at all when determining who to interview or rank for the match.

Although it is difficult to determine what percentage of applicants use paid writing or editing services for personal statement writing, the plethora of available options speaks to the potential consumer market. A quick review demonstrates options ranging from \$50 to \$500 depending on the length, time frame, and experience of the editor.²⁶ Unfortunately, high inter-reader variability and disagreement on the quality of personal statements leave substantial ambiguity on what makes a good personal statement.²⁷ Given this inherent variability; perceived limited impact on interview invites; and considerable emotional, time, and possible financial burden, it is not surprising that applicants will resort to using any resource at their disposal to facilitate writing this personal statement.

ChatGPT is one such resource that has become freely available after its launch on November 30, 2022, by start-up OpenAI.²⁸ At its core, ChatGPT is a sophisticated large language model that is designed to generate human-like responses in response to an inputted prompt.

Table 1. Results of the Administered REDCap Survey, Reported in Aggregate

How long do you currently spend reviewing a personal statement for each plastic surgery applicant?

for outer prastic surgery approarts	
No time	0 (0%)
Less than 5 min	18 (52.9%)
5–10 min	12 (35.3%)
10–15 min	3 (8.8%)
More than 15 min	1 (2.9%)
How important do you believe the personal state	ement is in
determining who to interview and/or rank?	
Not important	6 (17.6%)
Somewhat important	25 (73.5%)
Very important	3 (8.8%)
Have you utilized ChatGPT before?	
Yes	21 (61.8%)
No	13 (38.2%)
Unsure	0 (0%)
How confident are you in determining whether	ChatGPT was
used to write a personal statement simply by r	eading it?
Not confident	29 (85.3%)
Somewhat confident	5 (14.7%)
Very confident	0 (0%)
Does your program currently utilize AI-detection to identify whether ChatGPT has been used to personal statement?	
No	29 (85.3%)
Yes	0 (0%)
Not yet, but will in the future	4 (11.8%)
Unsure	1 (2.9%)
Use of ChatGPT in what aspect of the personal s creation process do you believe is ethical?	
Should not be used at all	20 (58.8%)
Brainstorming only	4 (11.8%)
Editing only	5 14.7%)
Writing only	2 (5.9%)

Its versatility allows it to write and debug code, formulate business pitches, compose poetry, summarize textbooks, pass standardized tests (eg, USMLE step 1), and write creative and scientific manuscripts alike.^{29–32} This versatility has allowed ChatGPT to accumulate more than 100 million users in 5 days with 1.8 billion all-time views to date.³³ Despite the extensive number of reported users, our study demonstrates that only 60% of surveyed PDs report utilizing ChatGPT previously. Interestingly, it seems plastic surgery PDs are late adopters of this technology and their unfamiliarity and/or ignorance with the software may lead to potential bias.

Although no articles currently exist detailing how to use ChatGPT for personal statement creation, it is easy to imagine the profound impact it can have on brainstorming, outlining, writing, and editing personal statements. A recent study polling anesthesiology PDs found that ChatGPT can create personal statements that PDs find acceptable and have difficulty differentiating from humancreated statements, with speculation that AI software, such as ChatGPT, may replace other more expensive personal statement contracting services in the future.^{8,34} One can simply upload their curriculum vitae to the software and

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instruct it to create a personal statement for an application to plastic and reconstructive residency. ChatGPT can further change the style, content, and tone as prompted by the user. Ultimately, the user would be responsible for the generated content and would dictate the final product based on their prompts to ChatGPT. The benefits of ChatGPT in personal statement writing are obvious-not only does it save time and labor, but it can replace paid editors and make the application more equitable for those with financial constraints and/or English-as-secondlanguage applicants.8 Another such potential benefit of AI use is evidence of applicant innovation, adaptability, and demonstrated ability to use all available resources to complete a complex task-a core competency of systems-based learning. Despite these advantages, the negative implications of using AI are vast and still developing.

In academic writing, the use of text-generating software is far from gaining mainstream acceptance.³⁵ Leading scientific journals and editorials have opposed AI-generated content, citing its incompatibility with established ethical guidelines regarding credibility and reliability.^{36,37} Several recent journal articles have analyzed the role of large language models, namely ChatGPT, within the realm of academic plastic surgery.^{37,38} The ease of manuscript generation also increases concern for the oversaturation of journals with studies that lack significant scientific contribution merely for increasing academic output.35,39 Plagiarism, bias, and inaccurate content are all risks that authors and journals must be wary of if ChatGPT or its counterparts are used.^{36,40,41} Furthermore, although the initial version of ChatGPT is freely accessible, a new paid version may restrict access to knowledge and worsen inequities already present in academia.42

The inability to effectively determine which parts of the text are generated by the author as opposed to AI complicates ownership of intellectual property, and current AI-detector tools are ineffective at determining true authorship.^{39,43} Despite the rapid expansion of AI technology, recent literature suggests that detection software lags significantly. One study demonstrated how simple strategies such as introducing grammatical errors or paraphrasing could trick detection software, citing overall low efficiency in detection.⁴⁴ Another study brought attention to the potential misdetection of human content as being AI-generated.⁴⁵ Although most of the surveyed PDs report utilizing ChatGPT previously, 85.3% do not feel confident, whereas only 14.7% feel somewhat confident in identifying text written by AI. Although 11.8% of PDs report the possibility of AI-detection software in the future, no PD confidently reported the current utilization of such software in the application screening process.

Although personal statement writing is different in content and intent than that of scientific journals, the issues of originality, intellectual property, and loss of creativity and voice remain when writing is outsourced to AI and pose an ethical dilemma. Although ChatGPT can help applicants generate ideas, produce eloquent language, and correct grammatical inaccuracies, by design, it is not capable of generating truly original ideas or writing styles and can hinder the creative and linguistic growth of applicants.

Although not necessarily implying that the AI-generated content would be fabricated or fraudulent, the use of ChatGPT may inaccurately reflect the applicant's true personality, passion, or achievements and may be related to why most PDs believe the use of ChatGPT for any part of personal statement writing to be considered unethical. Additionally, questions exist regarding intellectual ownership and potential concerns of plagiarism, and whether an AI-generated personal statement could be viewed as plagiarism. One may argue against plagiarism if the content is accurate and represents the applicant truthfully. However, the argument could still be made for plagiarism, as the applicant would be submitting written work that they did not create independently. Moreover, it is possible that the use of AI to add embellishments to a personal statement may inaccurately represent the applicant's voice and personality. Furthermore, personal statement writing is a chance for self-reflection and allows applicants the chance to introspect on their accomplishments, progress, motivations, and goals. By using ChatGPT, applicants risk losing this valuable experience. Finally, if multiple applicants utilize ChatGPT, similar personal statements may effectively undermine the underlying sentiment of personal statement creation in the first place.

Our study has several limitations. Of note, the survey was not validated before distribution. Despite 4 rounds of survey administration to 120 PDs, only 34 (28.6%) responded. Possible explanations for low survey response rate include survey fatigue as well as the administration of the survey during the summer months, when vacations are likely common. We received several "out of office" automated email replies throughout the 4 rounds of emails. However, only 1 PD was officially excluded from the study, as their email returned "undeliverable" over all 4 rounds, and therefore, we were unable to achieve contact. The remaining PDs were able to be contacted at least 1 time throughout the duration of the survey period. Of course, it is possible that the PDs who have responded do not represent the opinion of PDs at large, and further studies may help clarify their perspectives. Although personal demographic information was not collected in the survey, it would be interesting to explore if certain characteristics were associated with certain PD perspectives on ChatGPT use. Also, as the familiarity and integration of AI language models such as ChatGPT increases, the perspective of the PDs may vary over time. Nonetheless, plastic surgery residency programs should be clear on their stance on the use of these AI programs as their fast-paced development and integration continue to occur.

CONCLUSIONS

The utilization of AI models such as ChatGPT could have a profound impact on personal statement brainstorming, outlining, writing, and editing. However, its use raises concerns for many ethical implications, including plagiarism and inaccurate portrayal of the prospective applicant. Currently, the majority of the surveyed PDs feel its use to be inappropriate in any part of personal statement creation. To avoid the underlying issues with plagiarism and ethical use, the authors of this study currently caution prospective plastic surgery residency applicants in their use of AI for personal statement creation until it is clarified by the Academic Council of Educators in Plastic Surgery, which oversees this process in plastic surgery. Further studies may help clarify any evolution in perspectives of plastic surgery programs as the use of AI models becomes more mainstream.

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DISCLOSURES

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