

Artificial Intelligence and Résumé Critique Experiences

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Abstract

Where résumés are concerned, student supports tend to include tactical feedback that addresses issues in students' writing and strategic feedback aimed at coaching critical self-reflection. However, there is not always time to cover all that could be offered by both kinds of feedback in a single résumé critique. Given demands on staff time, many career services administrators are considering opportunities to leverage artificial intelligence-based (AI) products that might offer tactical feedback and allow staff to focus on offering strategic feedback. In a field experiment, we explored how novice job seekers' use of an AI-based résumé critique product influenced their subsequent face-to-face résumé critique experiences, especially the kinds of feedback offered and learning outcomes that resulted from this. As expected, the AI offered substantial tactical feedback and less strategic feedback. Students' use of the AI did not result in greater opportunity for strategic feedback and associated learning outcomes. Rather, the AI rendered issues in students' writing more salient. In turn, this invited more attention to tactical aspects and less attention to strategic aspects of students' résumés. Further, students and staff perceived

that face-to-face résumé critiques enhanced students' preparedness for writing a résumé regardless of whether students used the AI prior to their critique. Use of the AI did not influence students' perceptions of service quality. These results suggest that the AI did not provide greater opportunity for staff to provide strategic feedback. The usefulness of the AI seems limited to situations in which the student has already undertaken a critical self-reflection process and the goal is specifically to acquire tactical feedback.

Keywords: career services; knowledge and skills; co-operative education; experiment

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Brief résumé critiques are common to many career service settings. Typically, they feature face-to-face interactions between students and staff that are approximately 15-minutes long. Such interactions are opportunities to offer

coaching and feedback to students. Two kinds of feedback are common to such critiques: tactical feedback and strategic feedback. Tactical feedback refers to feedback about the specificity and quality of students' writing, and identifies errors and content that could be clarified. Strategic feedback refers to feedback about the bigger picture of the job search process. It involves facilitating students' critical self-reflection. This includes helping students identify their strengths and interests and clarify how to share their career story with, or tailor it to, particular employer audiences

Both kinds of feedback are generally helpful to students. Tactical feedback may help students identify and address issues in their writing. Addressing such issues is important to student employability. After all, recruiters prefer well-written résumés over poorly written ones (Shore et al., 2021). Strategic feedback is helpful, too. It can help students reflect on their résumés. Such reflection can open a "window into the life story of a client" (Toporek & Flamer, 2009, p. 4). This is important to the development of students' self-analytical skills and career identities (McDow & Zabrocky, 2015; Stevens et al., 2019; Toporek & Flamer, 2009). Ultimately, both kinds of feedback facilitate positive career education outcomes.

Unfortunately, there is not always time to offer both kinds of feedback to students in the space of a single résumé critique. Further, students can only absorb so much feedback in a single critique. Certainly, this issue could be addressed by offering multiple résumé critiques. However, it is often already challenging enough for students to access a single résumé critique. Indeed, résumé critiques are among the most demanded career services (Gallup, 2016; Makela et al., 2014). At many institutions, there are simply not enough staff resources to meet such demand. Asking that students attend several critiques may exacerbate the issue. As a result, many career services administrators are interested in understanding how to supplement staff resources to enhance students' access to tactical and strategic feedback.

Artificial intelligence-based (AI) résumé critique products may offer a solution to this issue. Such products are now commercially available and increasingly common in everyday use by students, employers, and educators. Hundreds of post-secondary education institutions offer AI-based résumé critique products to interested students, and many more are likely considering doing so. The appeal of such products may be tied to AI's ability to provide tactical feedback with expediency. It may provide feedback that helps writers communicate more clearly (e.g., Razack et al., 2021). This suggests that AI-based résumé critique products could complement staff resources. They

could offer students a wealth of tactical feedback, and thereby allow staff to focus their résumé critiques on coaching students through the more complex strategic pieces of self-reflection and résumé writing.

In this study, we sought to understand how adding an AI-based component to a typical face-to-face résumé critique might influence students' résumé critique experiences. We were most interested to understand how students' use of an AI-based résumé critique product would influence subsequent student-staff interactions. Critically, we wanted to know whether conversions between staff and students who used (versus did not use) the AI included more (versus less) strategic feedback. Ultimately, the goal of our research was to inform career services administrators' decisions about offering AI-based résumé critique products.

Background

Résumé Critique Feedback

Résumé critiques are offered by most career services centres and most students will participate in a résumé critique before graduation (Gallup, 2016). The demand for such services is not surprising. Though on the surface they appear simple, résumé critiques can have a powerful impact on students. Résumé critiques not only offer opportunities to identify issues in students' writing, they can transform how students think about themselves, their

value to employers, and the job search process. They can contribute to students' knowledge and skills associated with preparing high-quality résumés (Crozier & Lalande, 1995; Lalande & DeBoer, 2012; McDow & Zabrocky, 2015), including self-analytical skills that are important to career education (Toporek & Flamer, 2009). Feedback theory (Hattie & Timperley, 2007) suggests that the feedback students receive during a résumé critique influences such desirable critique outcomes.

Feedback is information about a one's performance with the intent to improve such performance (Hattie & Timperley, 2007). In the context of a résumé critique, such feedback may focus on tactical aspects of the résumé, such as spelling, grammar, formatting, and word choice (i.e., writing mechanics). Résumé critiques may also offer strategic feedback that helps students reflect and make sense of their experiences, skills, and how best to communicate these to employers, including tailoring their content for different industries and job types. When students receive such feedback, they ideally become better able to craft and tailor high-quality résumés (McDow & Zabrocky, 2015).

Staff and AI-Based Feedback

For decades, career services like the résumé critique were driven exclusively by trained staff. Such staff would meet with students in one-on-one or group settings. Discussions between staff and students provided opportunity

for offering feedback. Recently, AI has been used to simulate such interactions. For example, AI-generated chat bots now offer career-related advice (Lee et al., 2019). Other AI-based products help students identify career interests (Nguyen et al., 2018) and skill development opportunities (Barney & Madigan, 2019). As mentioned, several AI-based résumé critique products are also now available. Indeed, AI-based products are transforming post-secondary education in a variety of ways (Aoun, 2017; Cox, 2021), including the administration of career services.

Given the emergence of AI-based résumé critique products, it seems useful to consider differences in feedback offered by AI versus that offered by staff. Intuitively, one might expect feedback generated by AI to focus on tactical aspects of students' writing. It is well known that AI is remarkably able to identify issues such as spelling errors. Anyone who has used a word processor program to write knows that the software can capably spot and provide feedback on such issues. Some AI products do however offer strategic feedback, too. For example, we are aware of one product that suggests skills learned or demonstrated based on individuals' previous work experience. Overall, the AI offers learning outcomes by analyzing what the student has written and comparing this to what others in similar contexts have written in their résumés.

Staff can identify tactical issues with students' writing, too. Indeed, all career educators should

be equipped to guide students toward improving their ability to represent themselves in their documents. Yet, a critical strength of staff-driven résumé critiques lies in the offering of strategic feedback that can extend well beyond the student's written work. Skilled staff are generally equipped to support students in reflecting on what they've experienced, who they are, and what they are aiming to try next. Moreover, skilled staff can pace and scaffold such feedback so as to intentionally foster student agency and confidence within the context and time demands of the job search. It is these strategic elements of student-staff interaction that seem less easily addressed via AI-driven feedback. With this in mind, the value proposition of an AI-based résumé critique is arguably its ability to offer tactical feedback in ways that open up opportunities for staff members to focus their time with students on strategic feedback.

What remains unclear is whether feedback offered by an AI-based résumé critique product will indeed provide these greater opportunities for staff to focus on strategy. If AI-generated feedback does help students identify, address and move past tactical issues, staff could focus all their attention on offering strategic feedback such as on how students' experiences and identities connect to broader career possibilities and work environments. Yet, it is also possible that the AI will instead lead to even more questions about writing. Many people are uncomfortable with AI-based feedback

(Tong et al., 2021) and want humans to help them make sense of that feedback (Luo et al., 2019). This alternate outcome would suggest that adding an AI-based component to an already effective résumé critique might even hinder opportunities for strategic feedback. We explored the potential outcomes of introducing an AI-based résumé critique product in the present study.

Method

Student Participants

Participants in the study were undergraduate engineering students at the University of Waterloo who were preparing for their first job search ($n = 60$). All the participants were part of a co-operative education (co-op) program. Co-op is an education program in which students seek employment as a requirement for graduation. Co-op students alternate between academic terms and terms of paid employment throughout their education. Such students were of interest because they represent typical users of career services who might be interested in résumé critiques. The students included in this study were mostly Asian (67%) or white (18%) and about half (47%) identified as female.

Procedure and Conditions

After ethics clearance (project # 41680), potential participants were invited by email to the study which took place in January 2020. The study occurred

on campus in a building associated with co-operative education and employment. As they arrived, students were provided study documentation and were randomly assigned to either a *traditional* or *AI-first* condition.

Students in the traditional condition participated in a traditional face-to-face *résumé critique*. Each critique lasted about 15 minutes long and was conducted by a trained career educator matched to students at random. All critiques were conducted in accordance with the best practices in career educating/advising regularly followed at the career centre. After their critique, students in the traditional condition were asked to complete a questionnaire about their experience (called the post-critique survey). Staff also completed a questionnaire in which they assessed student outcomes. Once questionnaires were collected, students were thanked for their time and optionally entered into a draw for one of three \$50.00 gift cards. They could choose to remain at the study venue to use the AI and provide feedback about it, but some left at that time.

The procedure was identical for students in the AI-first condition, with two exceptions. First, prior to participating in a traditional face-to-face *résumé critique*, students in this condition were invited to use an AI-based *résumé critique* product. They were provided a brief introduction to the product and given instructions for how to use it by a knowledgeable career educa-

tor. They were then provided 45 minutes to use the product. The AI tool generated feedback within a minute of uploading a *résumé*, so students had ample time to review the feedback generated by the AI. After using the AI, students in this condition were asked to complete a brief questionnaire about their experience. As mentioned, students in the traditional condition were provided the same opportunity, after their face-to-face critique, but some passed on the opportunity. For students in the AI-first condition, the study proceeded to the face-to-face critiques and questionnaires as described above.

Measures

Feedback

At the end of each *résumé critique*, career educators within the University's career centre reported which of five topics were discussed: (1) grammar and spelling, (2) *résumé* format, (3) bullet content (e.g., proper action verbs), (4) skill identification, and (5) *résumé* customization (i.e., how to match the *résumé* to a specific job or industry). These topics were identified before the study by staff as the most common within critiques. Responses were coded as 0 = "not discussed" and 1 = "discussed". Responses were then transformed into two variables. The first three topics were merged into a variable called *tactical feedback*. This represented the extent to which discussion focused on writing-related issues. The final two topics were merged

into a variable called *strategic feedback*. This represented the extent to which discussion focused on students' experiences, skills, and how to communicate these to employers through a *résumé*.

Depth of Discussion

Staff were also asked to report on the general depth of the conversation where 1 = "mostly surface" and 7 = "mostly deep". This variable was included to better understand the influence of the AI-based *résumé critique* on student-staff interactions.

Self-Reported Learning Outcomes

Students in the AI-first condition were asked to report as many as three learning outcomes associated with use of the AI-based *résumé critique* product. Examples of learning outcomes reported include "Don't overuse the same action verb," and "To change the font of my resume, so it can be more readable." Such learning outcomes were coded by the first author into categories corresponding to the kinds of feedback discussed in this paper (tactical and strategic). The goal was to explore the insights students gleaned from using the AI. Critically, we did not make efforts to include learning outcomes associated with use of the AI-based *résumé critique* product reported by those in the traditional condition, because some students in that condition left the study after their face-to-face critique. As well, those in the tra-

ditional condition who did use the AI did so for less time (between 20 and 30 minutes) than did those in the AI first condition (45 minutes). Thus, a fair comparison between conditions was not possible.

Additionally, all students were asked to report three learning outcomes associated with the résumé critique event. Such learning outcomes were used to identify insights students gleaned from face-to-face résumé critiques. Recall that half of the students participated in a face-to-face résumé critique without an AI component while the other half used the AI prior to their face-to-face critique. Thus, we were able to examine the influence of using the AI on subsequent learning outcomes of a face-to-face critique.

Such learning outcomes were coded by the first author and a research assistant. Each response was coded based on the kinds of feedback (tactical and strategic) to which they might correspond. Examples of statements coded as tactical are “I learned that I may use too many filler words,” and “I need to incorporate more action words into my bullet points.” Examples of statements coded as strategic are “More emphasis on soft skills,” and “Balance in résumé between hard/soft skills is important.” The intraclass correlation coefficient (ICC; Koo & Li, 2016) was used to examine agreement between the coders. Initial agreement between the two coders was sufficient for both variables (tactical: ICC = .99; strategic: ICC = .96). A second research assistant

was consulted to resolve disagreements.

Knowledge and Motivation

On the post-critique survey, students were asked to self-report the degree to which they felt knowledgeable about preparing a résumé (1 = “not knowledgeable” to 6 = “very knowledgeable”) and motivated to prepare a résumé (1 = “not motivated” to 6 = “very motivated”). They responded in terms of how they had felt before their face-to-face critique and how they felt after it. Staff members also completed the same measures in terms of their perceptions of student knowledge and motivation both before and after the face-to-face critique (where 1 = “not knowledgeable” to 6 = “very knowledgeable” for knowledge, and 1 = “not motivated” to 6 = “very motivated” for motivation).

Willingness to Recommend the Critiques

Students in the AI-first condition were asked to report their willingness to recommend the AI-based résumé critique to their friends. On the post-critique survey, students in both conditions were asked to report their willingness to recommend the face-to-face critique to their friends. Responses to both questions were provided on 10-point scales where 1 = “not at all likely” and 10 = “extremely likely.” These questions were included in the study because willingness to recommend

is a key indicator of service quality (Zeithaml et al., 1996).

Results

Feedback

Two-tailed t-tests were used to examine differences in feedback between the two conditions. Results suggest that tactical feedback did not differ significantly between the AI-first condition ($M = .64, SD = .21$) and the traditional condition ($M = .56, SD = .18$), $t(58) = 1.72, p = .09$. Similarly, strategic feedback did not differ between the AI-first condition ($M = .76, SD = .31$) and the traditional condition ($M = .78, SD = .28$), $t(58) = .32, p = .75$.

Depth of Discussion

A two-tailed t-test was used to examine differences in depth of discussion between the two conditions. Results suggest that the depth of discussion did not differ between the AI-first condition ($M = 4.74, SD = 1.28$) and the traditional condition ($M = 4.55, SD = 1.64$), $t(57) = .33, p = .65$.

AI Use Learning Outcomes

Self-reported learning outcomes of the AI-based critique for students in the AI-first condition were coded into three themes: tactical, strategic, and other. The results of the coding are shown in Figure 1. Twenty-eight students provided at least one learning outcome after using the AI. Most (39) responses were categorized

as tactical. They related to word choice (e.g., “Too many filler words,” “Don’t use the same word over and over,” “Word overused”) and formatting (e.g., “A lot of information about consistency and formatting that I couldn’t have caught,” “I need 2-3 lines for each bullet,” “Page layout and spacing. There were some inconsistencies in my spacing”). Several responses (18) were categorized as strategic (e.g., “I could have used action verbs that were stronger than ‘use’ or ‘provided’,” “Feedback about common skills that I have shown evidence of and some I haven’t/could do more of,” “I learned the good points about my resume (listing teamwork)”). Several other responses (11) were categorized as other (e.g., “AI has serious

potential,” “[The AI] was not able to identify software names like Solidworks and AutoCAD,” and “Increased confidence due to detailed feedback”).

Résumé Critique Learning Outcomes

Self-reported learning outcomes of the face-to-face résumé critiques were coded into two themes. Consistent with the main thrust of this paper, the themes were tactical (i.e., related to students’ writing) and strategic (i.e., related to students’ experiences, skills and communicating these). The goal was to understand whether such learning outcomes differed between conditions. Students reported 132 learning outcomes.

The average number of learning outcomes reported did not differ between the AI-first condition ($M = 2.81, SD = .40$) and traditional condition ($M = 2.66, SD = .61$), $t(53) = 1.08, p = .29$. Results of two-tailed t-tests suggest that there was a significant difference between conditions in learning outcomes. Students in the AI-first condition reported more tactical learning outcomes ($M = 1.62, SD = 1.17$) than did those in the traditional condition ($M = 1.00, SD = .93$), $t(53) = 2.15, p = .04$. Also, students in the AI-first condition reported fewer strategic learning outcomes ($M = 1.04, SD = .96$) than did those in the traditional condition ($M = 1.62, SD = .94$), $t(53) = 2.27, p = .03$. These results are illustrated in Figure 2.

Figure 1

Frequencies of Learning Outcome Categories Based on Reported Learning Outcomes by Students in the AI-First Condition (n = 28)

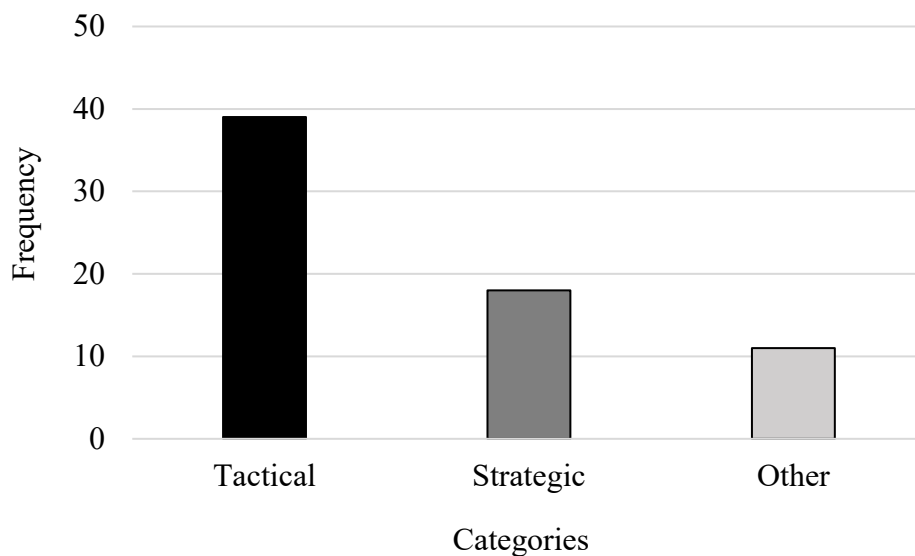
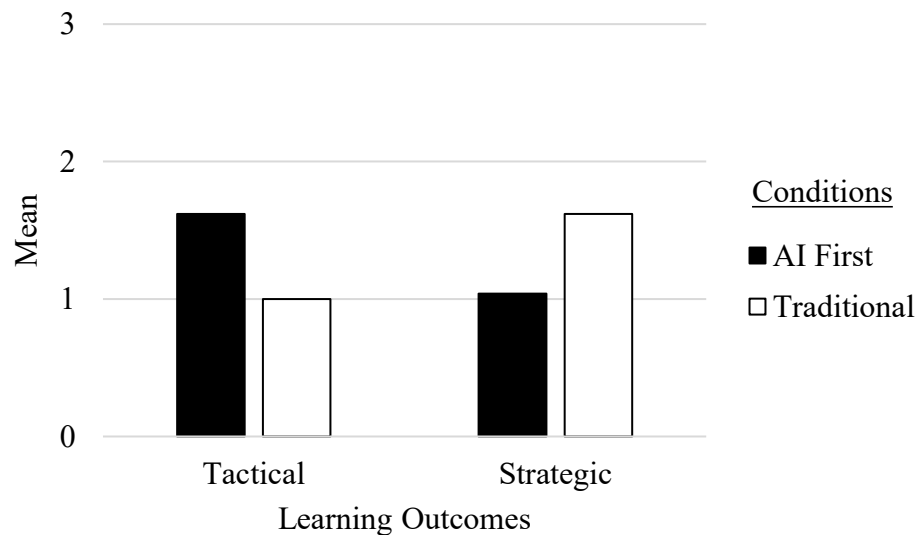


Figure 2

Mean Tactical and Strategic Learning Outcomes of the Résumé Critiques Between AI-first and Traditional Conditions (n = 60)



Self-Reported Knowledge and Motivation

Two-tailed t-tests were used to examine differences in self-reported knowledge and motivation between the two conditions. Table 1 summarizes the means and standard deviations associated with the analysis. Self-reported pre-critique knowledge did not differ between conditions, $t(58) = .29, p = .77$. Similarly, self-reported pre-critique motivation did not differ between conditions, $t(58) = .98, p = .33$. These results simply reflect that the students were randomly assigned to conditions.

More importantly, results suggest that self-reported post-critique knowledge did not differ between conditions, $t(58) = 1.75, p = .09$. Similarly, self-reported post-critique motivation did not

differ between conditions, $t(58) = .66, p = .51$. These results suggest that use of the AI-based résumé critique product was not associated with self-reported knowledge and motivation resulting from a face-to-face résumé critique.

Staff-Perceived Knowledge and Motivation

Two-tailed t-tests were used to examine differences in staff perceptions of students' knowledge and motivation between the two conditions. Results were like those presented in the previous section. Staff members' perceptions of students' pre-critique knowledge did not differ between conditions, $t(57) = .68, p = .50$. Similarly, staff members' perceptions of students' pre-critique motivation did not differ

between conditions, $t(57) = .12, p = .91$. Again, this reflects random assignment to conditions. More importantly, staff members' perceptions of students' post-critique knowledge did not differ between conditions, $t(57) = .41, p = .68$. And, staff members' perceptions of students' post-critique motivation did not differ between conditions, $t(57) = .73, p = .47$.

Willingness to Recommend

Two-tailed t-tests were used to examine differences in students' willingness to recommend the AI product and face-to-face critique between the two conditions. Results suggest that willingness to recommend the AI did not differ significantly between the AI-first condition ($M = 8.09, SD = 1.31$) and the traditional condition

Table 1

Means and Standard Deviations of Students' Self-Reported Pre- and Post-Critique Knowledge and Motivation (n = 60)

Group	Knowledge				Motivation			
	Pre-critique		Post-critique		Pre-critique		Post-critique	
	M	SD	M	SD	M	SD	M	SD
Traditional	3.97	.89	5.03	.67	4.57	1.30	5.47	.57
AI first	4.04	1.00	5.32	.57	4.24	1.28	5.51	.53

Table 2

Means and Standard Deviations of Students' Pre- and Post-Critique Knowledge and Motivation as Perceived by Staff (n = 60)

Group	Knowledge				Motivation			
	Pre-critique		Post-critique		Pre-critique		Post-critique	
	M	SD	M	SD	M	SD	M	SD
Traditional	3.70	1.12	5.40	.67	4.97	1.22	5.57	.73
AI First	3.90	1.11	5.33	.69	5.00	1.00	5.69	.54

($M = 8.39$, $SD = 1.20$), $t(52) = .86$, $p = .39$. Similarly, willingness to recommend the face-to-face critique did not differ significantly between the AI-first condition ($M = 9.22$, $SD = 1.01$) and the traditional condition ($M = 9.07$, $SD = 1.05$), $t(55) = .57$, $p = .57$.

Discussion

Students' use of the AI rendered tactical issues with their writing more salient. More than half of the learning outcomes reported from the AI related to bad spelling, overused and filler words, and poor formatting. Students also reported that the AI encouraged them to think about choosing more impactful words to represent their skills to employers. This is also

related to writing because writing is about communicating to an audience. Use of the AI seemed to help students think about which words they should use so that their writing appealed to employers. This suggests that the impact of the AI-generated feedback is mostly tactical. Students self-reported learning outcomes indicating that they paid more attention to the tactical feedback generated by the AI than its strategic feedback.

Our main interest was in understanding whether such tactical feedback would influence dynamics between students and staff during a subsequent résumé critique. Specifically, we wanted to know whether use of the AI would affect opportunities for providing strategic feedback. The

results suggest that use of the AI did not afford such opportunities. The amount of tactical feedback and strategic feedback offered to students, according to staff reports, did not differ between conditions. Similarly, the staff-perceived depth of conversation, which is a proxy for opportunities for strategic feedback, did not differ between conditions. This is unfortunate because it suggests that introducing the AI did not enable staff members to offer more strategic feedback.

In terms of overall impact, there was clear evidence that the résumé critiques were useful. Post-critique knowledge and motivation were higher than pre-critique knowledge and motivation from the perspectives of both students and staff. This is

consistent with previous research on the benefits of résumé critiques for student job seekers (Crozier & Lalande, 1995; Lalande & DeBoer, 2012; McDow & Zabrocky, 2015). From the perspective of feedback theory, it may be that such critiques offer feedback that is useful to the development of knowledge and skills. Students and staff then perceive that such feedback encourages greater knowledge and motivation for writing a résumé. However, whether an AI-component was included in such critiques seemed to have little effect on desirable critique outcomes.

We were also interested in understanding how the AI might influence learning outcomes associated with résumé critiques. Results suggested that the AI did influence students' learning outcomes. This influence was not consistent with the interest to provide staff more time for strategic feedback. In the traditional condition, students reported more strategic learning outcomes than tactical learning outcomes. Meanwhile, the AI-first condition did not amplify such outcomes, but rather achieved the inverse effect. Those who used the AI first learned more about tactical aspects of their writing and less about strategic aspects of the job search in their in-person critique compared to those in the traditional condition. Of course, tactical learning outcomes are important to students' résumé quality; however, the hope was that the AI would take care of tactical matters and provide more opportunity for staff-led strategic feedback, leading to even greater

strategic learning outcomes. This was not the case.

Use of the AI had no influence on students' perceptions of service quality. Such perceptions were measured in terms of willingness to recommend the résumé critiques to others. Students' recommendations help career services centres reach yet more students. If the AI enhanced willingness to recommend, even if it did not influence learning outcomes of the résumé critiques, then it could serve as a useful promotional tool. Yet, the results suggest that students who used the AI were not more likely to recommend the service than those who did not use it. Further, students were more willing to recommend the face-to-face component of their experience than they were to recommend the AI itself.

These findings provide deeper insight into the role of AI in providing feedback. Previous research (Tong et al., 2021) suggests that students' responses to AI-generated feedback may be more negative than responses to feedback provided by a human. Students in this study seemed to respond more positively to feedback offered by staff members. This seems consistent with research that suggests feedback provided by humans is often preferable even when feedback from an AI is technically advantageous (Glikson & Woolley, 2020). This highlights the importance of the support that staff can offer. Career services staff may provide feedback in ways that help focus attention on more strategic than

tactical feedback. Such feedback may signal advocacy and support (Toporek & Flamer, 2009) in ways that the AI cannot. This seems to be a critical difference between the AI and supportive career services staff.

Implications for Career Services Educators and Managers

The present research suggests that career services managers should think critically about offering AI-driven feedback as part of résumé critiques. AI may be appealing to such managers because of its scalability and capacity to provide comprehensive information in only a few seconds. Yet, in the present study we did not find evidence that adding an AI component to an established staff-led résumé critique improved students' experience. As well, it did not provide staff members greater opportunity to shift attention from tactical feedback to strategic feedback. This is important to consider given that most career services centres are looking for ways to offer both kinds of feedback with limited staff resources. The evidence suggests that the AI offers substantial tactical feedback, but receipt of such feedback does not help students and staff focus on issues that are deeper than students' writing.

To be sure, the results suggest that offering the AI has merits that may resonate with some educators. Specifically, the AI identified issues in students' writing. This may be relevant to service delivery because identi-

fyng issues in students' writing can be a significant challenge when time is limited, and some aspects of such feedback may also fall beyond the intended scope of staff members' roles. Indeed, copy editing can raise ethical issues within post-secondary education, especially when students' résumés are submitted for course marks. If students receive proofreading services, ownership of intellectual property becomes less clear; this is problematic when students are being evaluated. In such cases, AI-based critiques could be the appropriate vehicle for providing students with feedback on writing mechanics.

However, there are risks to focusing on writing mechanics too soon in the résumé development process. Before concentrating on *how* students communicate their experiences and competencies, there is immense value in first identifying what is of most value to share, under what circumstances, and why. Supporting a student to uncover what they are capable of and in what ways that could be viewed within various settings can have an immense impact on employment outcomes. Thus, focusing on strategy can be a better investment of (particularly early) student time in preparing for applications and interviews. If students leave their critique focused on spelling and formatting, they may be missing the bigger picture of the résumé's purpose and how the story it tells can inform interview and networking choices as well. As such, their efforts from that moment forward may be mis-

guided, resulting in poorer performance in the job search process. Ultimately, this could easily result in a lack of regard or even loss of trust in the career centre and institution. This suggests that even though tactical feedback holds obvious appeal, it is not necessarily the best place to focus one's efforts.

Considering these results, AI-based résumé critiques may be most appropriate when learners already have experience reflecting on who they are and what they want, and when students are seeking work in well-defined settings where they are uniformly expected to conform to certain résumé standards. We note, for example, that many MBA programs report expecting students' résumés to look a certain way and asking students to provide specific types of details in their résumés. When this is the case, the AI-driven critique may be desirable because it provides common feedback about the mechanics of writing. In undergraduate settings, however, students may have a less developed sense of their strengths, and also be contemplating a broader labour market context, where standards for what constitutes an ideal résumé are less clear. When students require coaching in self-reflection and the guidelines for writing résumés are less prescriptive, the array of possible directions a student might take can be wide, which might not be a context well-steered by AI.

Future Research

This study highlights the important contributions of front-line career services staff. The positive experience of interacting with trained staff was not bettered by the AI-based résumé critique. Future research is required to better understand whether and how AI might complement staff resources. For example, future research could explore ways in which AI résumé critiques are useful when staff resources are not available. In that vein, a study could examine differences in self-reported readiness for creating a high-quality résumé between students who received no résumé guidance and those who used an AI-based résumé critique. This seems relevant given that growth in work-integrated learning programs across post-secondary settings may be on track to exceed the capacity of associated staff.

As well, the study focused primarily on students' subjective experiences within an hour of having been exposed to AI, including what they thought they learned and their willingness to recommend the service to others. Future research could use a similar research design but focus on objective outcome variables and different timeframes that might allow for more self-reflection. For instance, a study could measure pre- and post-intervention résumé quality and randomly assign students to use an AI or a control condition with no such AI. This would allow for an examination of the ways in which use of an AI can help students write better résumés.

This is clearly of interest given that the quality of students' résumés can influence their success in job search processes (Shore et al., 2021).

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