

# The Impact of COVID-19 Restrictions on Internship Processes

Andrea Adams\* and Anthony Mazza  
University of the District of Columbia (USA)

\*Corresponding author

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## ABSTRACT

Researchers in different disciplines worldwide have documented the direct impacts of the COVID-19 virus (COVID). Along with the direct effects, the impact of COVID restrictions has changed how students use traditional career readiness programs. Moreover, COVID restrictions act as a "career shock" for student job-seekers. Career shocks are extremely disruptive events that cause individuals to rethink career choices and reflect on their career plans. The global implementation of COVID restrictions has arguably created a "universal" career shock beyond the career shock theory's original foci. Expanding the career shock analysis to include universal disruptions requires a reevaluation of job-seeking methods and opportunities. As a part of rethinking job search methodology through a career shock theoretical lens, this paper focuses on how academic program professors and career center personnel collaborate to support job-seeking students. This research initiated an educational innovation due to the decline in internship availability impacting external interview placement. A non-placement pilot will assist students in completing traditional internship requirements while providing an in-class experiential learning opportunity. This Pilot Course was created as a direct response to the Federal Workforce Development Strategy announced in November 2020. It will use the success factors of adding a non-placement Work-Integrated-Learning (WIL) opportunity within the Practicum course and employ an androgogical, "Differentiated Instruction" design. The study concludes by discussing the future implications of practicum-based internships.

**Keywords:** Career Shock, Event Systems Theory, Experiential learning, Non-placement Work-Integrated-Learning (WIL), Virtual Interviewing, Asynchronous interviewing, artificial intelligence

## 1 Introduction

Students must take two consecutive courses during their senior year in the Administration of Justice program at UDC. The Problems of Practice (POP) and Practicum courses prepare students to transition between school and work. During the POP course, students learn workplace readiness competencies.<sup>2</sup> During the Practicum, students demonstrate these competencies, experience supervisor evaluation processes, and practice journaled reflections regarding their experiences. The Practicum's design accommodates UDC demographic trends by helping employed and mid-career students identify opportunities to grow and/or change their career paths. A collaboration with the Career Center was established to assist students. The collaboration included in-class Handshake<sup>3</sup> and workplace competency training.

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<sup>2</sup> Critical thinking/problem solving, oral/written communications, teamwork/collaboration, information technology application, leadership, professionalism/work ethic, and career management.

<sup>3</sup> Handshake is an online tool that UDC students are eligible to use to research employers and schedule interviews. It provides access to assessment tools and helps students with internships as well as permanent job placements.



Students learned how to register for jobs, internships, and graduate school fairs. After COVID required UDC to switch to remote learning, the Career Center continued to provide services remotely. However, the COVID restrictions eliminated face-to-face methods for securing jobs or internships. Several face-to-face internships were canceled. There was no way to forecast how job availability would impact graduate school admissions, internships, or employment opportunities. The availability of internships for the fall was in question as employers and organizations changed how they recruited and selected students. Where opportunities were available, COVID restrictions also impacted interviewing processes.

Career development theories that account for events that change career trajectories have been called career shocks. These theories help researchers understand responses to unexpected changes that cause individuals to reflect on their career choices and, depending on the event's nature, make changes. This paper reviews career shock literature to understand whether COVID restrictions act as both an individual and a universal career shock event. This paper makes some suggestions about higher education strategies based on career shock analysis

## **2 Literature Review**

### **2.1 COVID as a "Universal" Career Shock**

According to Akkermans et al. (2018), career shock is defined as an "extraordinary disruptive event caused by factors outside the focal individual's control," triggering deliberation concerning their career (p.4). After the disruptive event occurs, the individual engages in sense-making about whether or not the event should be considered a career shock and then engages in sense-making to access career shock effects. Career shocks are evaluated based on the event's frequency, foreseeability, valence, duration, and source. Generally, career shocks are infrequent<sup>4</sup> and unforeseeable, and under normal circumstances are events that an individual has no control over (Holm et al., 2005, as cited in Akkermans et al., 2018). However, Akkermans et al. (2018) suggest that even repeated and foreseeable shocks may also reach a threshold where career consequences are impacted (p.5). The valence of the event measures how strongly it is experienced. Events with longer durations have more consequences if the disruption level is high, even if they are novel. If the source of the career shock is external, it can affect the resources that a person has or uses to address it (p. 6). Career shocks also impact several career development assessment factors, such as perceived employability, career stage, career competencies, and the ability to realign new discipline/industry skill requirements with corresponding personal career investments. An individual's evaluation of the event concludes by considering the short and long-term implications of the event and determining whether the negative career shock will produce positive opportunities or negative consequences. Current career shock theory suggests that positive or negative results are based on the interplay between the event's context and an individual's specific situation. However, they note that the negative impacts of COVID are likely to be far-reaching for everyone (Akkermans et al., 2020).

Another critical aspect of career shock analysis is understanding the theoretical perspectives that define career shock attributes. Akkermans et al. (2018) describe several

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<sup>4</sup> Though an accumulation of the same experiences may act as a perpetual event (Rigotti 2009).

theoretical foundations. However, the event systems theory (EST) developed by Morgeson et al. (2015) focuses on the characteristics of events that are likely to impact an entity's norms, behaviors, and routines during a discrete time frame. The EST analysis suggests that COVID restrictions pose an event-driven, negative, external, and global threat to job-seekers. This is consistent with Akkerman's (2018) description of "generic" shocks that impact entire populations. Hofer et al. (2020) also looked at negative organization-related career shocks, such as workforce reduction, bankruptcy, or major ethical scandal on career optimism, finding that career shocks also have organization-related effects (p.2). To advance this perspective, we note that though an event's onset may be 'time-bound,' solutions and innovations may cause a more permanent shift in entity coping strategy.

Negative career shocks have impacts on individuals that are in different stages of career development. According to a study by Blokker et al. (2019), the effect of a negative career shock on young professionals undermined the mediated relationship between subjective career success (Authur et al., 2005) and perceived external employability. Since career success supports perceptions of employability, career shock has a more significant impact on students with limited employment experiences. Another study showed the effects of career shock on older workers. Kooji (2020) suggested that older workers use self-regulation strategies, such as upgrading their skills and competencies, protecting their motivation through disengagement, or adapting their response to the event. Older worker disengagement is borne out by Coibion et al. (2020), as described in the next section.

Individual-level effects are complicated by the universal impacts of COVID restrictions. Further, EST analysis provides a way to understand whether entity disruption and related changes create compounding negative impacts. We argue that these disruption strategies include an accelerated use of video interviewing (VI), coupled with asynchronous interviewers, and artificial intelligence (AI) analysis, resulting in a "universal career shock". Understanding these shifts may help academicians and career centers address the impact of COVID on students' ability to navigate an entity's response to COVID disruptions.

### **3 Methodology**

There are many accounts of action research projects that address curriculum development. Action research projects have been used to investigate university education knowledge that reflects real-life (Oksiutcz & Azionya 2017), understanding the practical effectiveness of integrating university social responsibility into the curriculum (Hsieh, 2019), and redesigning the curriculum in an English department Yamamoto et al. (2020). Gibbs et al. (2019) conducted a literature review of action research that discussed other action research curriculum projects, finding that action research "has proved to be a central approach to the investigation, reflection, and improvement of practice". For this study, action research methodology was used to critically address needed changes to the career development curriculum for graduating seniors. The action research process consists of professors engaging in five cycles of problem identification, active planning, implementation, evaluation, and reflection to hypothesize and test options to improve course experiences and outcomes.

The first cycle (problem identification) consisted of researching and incorporating additional awareness of interviewing methods/impacts and developing new interviewing competencies into the POP course. The second cycle (active planning) included providing

training for students for video interviewing. The third cycle (implementation) is developing a pilot program for students to participate in and evaluate the micro-credentialing process as a substitute for internships that have been unavailable during the pandemic. The fourth cycle (evaluation) will engage students in an evaluation process to gauge learning and understand the effectiveness of micro-credentialing training options. UDC students have a wide diversity of workplace experiences and are likely to hold distinctive perspectives. The fifth cycle (reflection) will reflect on the effort and outcomes to determine whether similar options are worth pursuing and how best to redesign the Problems of Practice and Practicum course sequence.

An outcome review conducted after each cycle identified areas for adjustment and provided suggestions to inform the next steps are reflected in the discussions below. It was critical to making curriculum and practice changes quickly, even before Cycle 4 and Cycle 5 outcomes were completed. Doing so provided immediate assistance to students faced with pandemic restrictions. The next two cycles' outcomes are included in additional research, where the full project will undergo evaluation and reflection.

### **3.1 Availability of Internships and Adaptability to COVID Restrictions (Cycle 1)**

COVID restrictions to stop the spread of the virus, such as social distancing and closures, were reflected in employment statistics as early as April 2020. In the Nielsen Homescan survey, Coibion et al. (2020) reviewed the pandemic's impact by looking at two Bureau of Labor Statistics measures: employment to population ratio and individual and overall unemployment rate measures. They found that between January and April 2020, the employment to population ratio decreased from 7.5 percentage points, reflecting a 20 million decrease in the number of employed persons. They also found that the unemployment rate decreased by only 2%, even though there should have been a 14% decrease based on job loss. The small decrease reflects the impact of the labor force participation rate (those out of work and who cease to look for work) on the unemployment rate, considering the 7% increase in worker retirements. These early pandemic job statistics are not measures of actual job loss but reflect individual pandemic-related behavior. These complex trends make it challenging to forecast how individuals will reflect on these changes to evaluate career shock effects. Moreover, evaluating this event's negativity or positivity on entities is unclear in that some entities' services are in demand while others are unable to operate under the restrictions. What is clear is that entities and individuals will engage in evaluation consistent with the theory.

For students, COVID restrictions immediately impacted them. A study on 1,500 University of Arizona students found that COVID impacted grade point average and class load. Statistics showed that more than 40% of students experienced losing a job, internship, or job offer. They also found that students from poorer ZIP codes were more severely affected (Aucejo et al., 2020). In some situations, internships were not canceled but switched to remote internships with mixed success. Briant and Crowther (2020) describe a pilot program using a "community of inquiry" online framework of collaborative learning experiences with success limited to some objectives (p.620). Bilsland et al., 2020 discussed implementing a similar pilot program, finding that student self-motivation and self-discipline were critical factors but moderated its success.

Traditionally, work-integrated learning (WIL) programs use employer-related projects to connect theory and practice in a class setting. However, COVID restrictions hampered these programs and forced the use of non-placement WIL. One program, slated for third-year undergraduates at the University of Wollongong, Australia, pivoted from a face-to-face internship to entirely online, requiring an adjustment to a non-placement, class-based internship (Rook & McManus, 2020). The new internship design focused on developing responsible leadership competencies using an "authentic"<sup>5</sup> methodology, a preparation and induction process, access to quality supervision, a debriefing process, and a reflection process. Using the Competency Assessment for Responsible Leadership<sup>6</sup> as a pre and post-survey, they found that student scores for ethics and values increased during the online internships. However, stakeholder relationships and innovation did not increase, suggesting some loss of effectiveness compared to face-to-face programs.<sup>7</sup> The study also reported the extensive increase in time required for academics and administrative staff. The learning and experiences were extremely beneficial.

These articles reflect real-world adaptations and solutions under COVID restrictions where professors modified experiential learning opportunities. They also reflect the academicians' dedication to helping students gain from these experiences during the pandemic, even though the results did not replicate face-to-face programs. Real-world, practical solutions will continue to be needed to address internship effectiveness.

### **3.2 The Impact of Video Interviewing and Other Automated Interview Tools (Cycle 1)**

More than 80% of Human Resource professionals surveyed indicated that the three most desirable skill sets for entry-level job applicants are reliability (97%), integrity (87%), and respect for teamwork (84%), and the major indicia of assessment is via past experiences and internships.<sup>8</sup> Students count on internships to provide them with the opportunity to demonstrate these skills. The COVID restrictions have prescribed how students are selected for these opportunities. Moreover, video interviewing (VI) may present a welcome option for job-seekers who cannot participate in face-to-face interviews. Employers have accelerated the use of VI, and HR recruiters are encouraging their clients to move to VI.<sup>9</sup> Many students reported that the training provided by the Career Center was their first exposure to VI. However, the research shows that VI also presents additional considerations for students, even though employers and recruiters praise its use. Though the literature is in its infancy, several articles have directly found racial and other forms of bias using VI methods. Conversely, some of these new methods incorporate strategies that address bias.

Just like VI provides different outcomes, so do other interview automation forms, like asynchronous interviewing, artificial intelligence (AI), and AI-aided interview analysis.

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5 Rook and McManus explained that authentic methodology refers "back to Ferns, et al, 2014, Kaider et al, 2017 and Ryan, 2013, students apply their disciplinary learning, and act as professional consultants on a project for a real host industry partner"(p.608).

6 See <http://www.carl2030.org/> for more information.

7 These issues will be addressed in the upcoming Practicum class. Two non-placement opportunities will be available for students who were unable to secure an internship, and the insights provided from this literature review will guide design and implementation of those projects.

8 SHRM (2019) Survey Findings-Entry Level Applicant Job Skills

9 Job Interviews Go Virtual in Response to COVID-19. Retrieved from: <https://www.shrm.org/resourcesandtools/hr-topics/talent-acquisition/pages/job-interviews-go-virtual-response-covid-19-coronavirus.aspx>

Fernandez-Martinez and Martinez (2019) examined AI use in human resources departments. They wanted to understand whether the algorithms used by AI produce accurate results. They found that AI tools can moderate personal grooming effects, but there is a lack of regulation for AI analysis done in interviews. To address these concerns, they developed a multi-agent architecture for AI that addresses ethical and legal considerations and protects AI-based video analysis done by employers from discrimination and bias claims. Feature extraction and emotional recognition tools are also emerging (Addulsalam et al., 2019, as cited in Fernandez-Martinez & Martinez 2019), but some researchers warn about their effectiveness.<sup>10</sup>

Other studies suggest that asynchronous VI can address bias. Rasipuram et al. (2016) compared asynchronous and face-to-face interviewing processes and found facial expressions and word usage are more relevant in a face-to-face interview. They also found that interface-based (AI) interviewing could accurately assess "below-average" communicators. They suggest that asynchronous methods are useful screening tools that do not penalize below-average communicators.

These articles represent the initial discussions about how virtual practices might impact selection decisions. Moreover, as with most COVID impacts, communities of color bear the brunt of negative "career shock" outcomes. Students need faculty and career centers to integrate VI-based methodology into course learning objectives and create awareness and corresponding strategies to address these concerns. It also suggests that career centers should continue to modify their training practices to address VI methods.

Consistent with the theory, EST career shock analysis suggests that interviewing norms have accelerated towards virtual interviewing.<sup>11</sup> Though it is hard to say now, it appears that using these platforms provides a cost-effective and expedient option for an increasingly global economy. Moreover, many organizations have already adopted asynchronous screening and may continue to increase its use as COVID restrictions linger.<sup>12</sup> As AI analysis integrates into standard practices, more job-seekers will be unknowingly evaluated using these methods. Understanding how these methods impact bias will become increasingly important. These new technologies require students to master additional interviewing skill sets. Students must master asynchronous and video interviewing practices to minimize the "cumulative"<sup>13</sup> career shock effects. They must also continue to be skilled at traditional interviewing skills for final interviews. Academic, industry and career center interventions require educators to align educational strategies to impact student engagement in career readiness programs. Lastly, by adopting active learning strategies and incorporating experiential learning exercises throughout the curriculum, educators should continue to incorporate "Work-integrated-Learning" opportunities that manifest in meaningful substitutions for traditional internships.

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10 Rhue, L (2018) Racial influence on automated perceptions of emotion.

11 McFarland, et al., (2020)

12 A face-scanning algorithm increasingly decides whether you deserve the job  
<https://www.washingtonpost.com/technology/2019/10/22/ai-hiring-face-scanning-algorithm-increasingly-decides-whether-you-deserve-job/>

13 Unilever's Radical Hiring Experiment, Resumes Are Out, Algorithms Are In To diversify its candidate pool, the company relies on software to sort applicants and targets potential hires on their smartphones: In Unilever's Radical Hiring Experiment, Resumes Are Out, Algorithms Are In - WSJ

## 4 Results

### 4.1 Career Center Intervention (Cycle 2-3)

The Career Center has extensive resources and pivoted to continue to provide most services remotely. Many of the services supported students in their job-seeking activities. The Career Center conducted remote career counseling for individuals and groups. Through Handshake, the center conducted preparation workshops to practice VI. Students needed to register for the virtual process, be trained to use the Handshake platform to search and find positions they were interested in, and schedule and participate in interviews offered through the Fall Job and Internship Fair.

Additionally, students who participated in the Historically Black College and University (HBCU) Job and Internship fair, another annual Career Center event, had to be trained on a different interviewing platform. Through these activities, students and Career Center personnel learned about utilizing these new platforms and opportunities together. Students were also able to engage in virtual networking during the process. Networking is a critical skill and an essential part of job-seeking.

Because of confidentiality concerns and the small student size, no reports were developed that provide student success in obtaining internships or jobs. Success was measured based on the completion of training for virtual interviewing. Overall, every one of the 19 students, every student attended at least one of the interviewing training sessions.

### 4.2 Course Intervention

As discussed before, the course's intervention integrated information about VI and artificial intelligence into career learning objectives. In another effort to address VI concerns, students were provided the opportunity to participate in a VI study. Mr. Louis Hickman and his colleagues at Purdue University are conducting an ongoing study about the effects of racial bias in algorithmic interviews. Their study attempts to recruit 2,000 Black and African American students to analyze verbal behavior during video interviews. The study originated from the concerns discussed in a letter by then-Senator, now Vice President, Kamala Harris, Senator Elizabeth Warren, and Senator Patty Murry. The Senators requested the Equal Employment Opportunity Commission (EEOC) develop fair-use guidelines for using facial recognition by employers to reduce bias against Black, African-American, and other ethnic group interviewees.<sup>14</sup> Because of the confidentiality of student participation, only anecdotal and volunteered reports were obtained. Students who participated in the virtual training reported that they were apprehensive once the training began because it posed questions asynchronously. This feedback supports the inclusion of this opportunity to increase student exposure to VI methodologies.

### 4.3 Non-Placement Internship for Practicum 2021: Pilot Program Details

The vision of the CJSS program at UDC is to prepare students for employment in careers related to justice, emergency management, and security disciplines. The program's

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<sup>14</sup> Letter from Kamala Harris, Senator to Acting Chair Victoria Lipnic, Commissioner Chai R. Feldblum, and Commissioner Charlotte A. Burrows of the Equal Employment Opportunity Commission (Sept. 17, 2018) <https://www.scribd.com/document/388920670/SenHarris-EEOC-Facial-Recognition-2#download>



mission is to offer an interdisciplinary curriculum that includes research, software application, and professional practice. The CJSS program includes two-degree program options: a Master of Science in Homeland Security Studies and a Bachelor of Arts in the Administration of Justice. This Pilot course has been introduced at the undergraduate level.

The Pilot course is organized into three modules (Emergency Management, Cyber Security, and Physical Infrastructure), culminating in a certification exercise. The pilot will be deployed in a multi-stakeholder partnership with active support from the White House Labor Task Force and external subject matter expert instructors. Seniors in the Administration of Justice program, who are simultaneously enrolled in the Practicum and ICI courses, will be required to join the subcommittee germane to their particular interest—a non-placement internship. This additional assignment allows select students to interface with public policy influencers on behalf of the pilot. The experience will ensure that Practicum students assigned to ICI complete the required 90 internship hours. All students will have an opportunity to work directly with industry professionals who are volunteering to share their expertise. The course construct will provide learning opportunities in technology, pedagogy, apprenticeships, and access to mentors. A study of the Pilot outcomes is planned for a future conference submission.

#### **4.4 College of Arts and Sciences Mandate**

The UDC College of Arts and Sciences encourages educators to design strategies that introduce holistic and interdisciplinary experiences. By resourcing knowledge from multiple disciplines and professors within the CJSS Department, the faculty created a differentiated instruction curriculum to address these potential issues. The ICI course introduces multiple frameworks for instruction based on student interest.

#### **4.5 Biden Administration Initiative**

COVID restrictions have severely hampered efforts to provide students with fundamental experiential learning opportunities by limiting internships and Practicum opportunities. CJSS professors developed a strategy to implement a non-placement initiative to complete an internship-like project to satisfy the Practicum course requirement. Somewhat fortuitously, the CJSS program had already begun planning to respond to the College of Arts and Sciences mandate's dual imperatives.

Fundamental to developing innovative education, UDC must be nimble enough to respond to public policy initiatives. One such opportunity presented itself in the form of the recent Federal labor mandate. The Biden administration's workforce development initiative: "Build Back Better," has specifically targeted investment in education and training programs that will support the labor force necessary to address issues in the nation's critical infrastructure, particularly in emergency planning, cybersecurity, and physical structures. In this context, UDC was challenged to develop a curriculum to support these efforts and create experiential learning opportunities. CJSS created the Pilot course *Introduction to Critical Infrastructures* (ICI) to explicitly align with the mandate.

The ICI pilot course's overall design leverages departmental expertise in the social and behavioral science research areas to increase the pool of culturally, geographically, and ethnically diverse multidisciplinary job applicants who possess highly desired skills. UDC is a



designated HBCU with an undergraduate student population that is 61% female and approximately 77% Black, 7% Hispanic, 3% Asian, 0.1% American Indian, and 7% White. Approximately 11% of the student body receives services from the UDC student disability office. These characteristics make UDC particularly suited for developing and implementing a course designed to increase underrepresented communities in the workforce.

The ICI curriculum prioritizes and models the instruction, pedagogical approaches, and pathways necessary to create a platform for students to find sustainable employment opportunities. The class strategy will integrate the opportunity to obtain free, entry-level certifications, enabling students to demonstrate minimal proficiency and accelerating access to job opportunities. The course endeavors to apply innovative multimedia approaches to instruction, including virtual reality experiences.

#### **4.6 Cycle 4 and Cycle 5**

Instructors, students, and industry professionals who participated in the pilot will provide evaluations of their experiences as a part of Cycle 4. The evaluation will merge feedback from the ICI course with the POP feedback using student course learning outcomes. Cycle 5 reflections use Karnieli-Miller's (2020) comprehensive reflective practice steps to understand what additional changes are critical for a more effective outcome<sup>15</sup>. Learnings from evaluation and reflection will be integrated into the next course sequence and used for future cycles.

### **5 Conclusion**

A critical takeaway of this literature review and ongoing collaboration is to continue to monitor the effects of COVID restrictions and their impacts on students and employers. Helping students anticipate and understand the implications of video interviewing is critical to student success. Students can prepare by practicing and getting help evaluating themselves using the VI process<sup>16</sup>. By collaborating with the Career Center, students will continue to receive training and practice. Because the impacts of using AI to evaluate interviews are unclear, further research on disparate impact discrimination and technological de-biasing techniques is necessary. Future studies should explore whether remote interviewing impacts ethnic minority hiring, whether maintaining or even sharing video interview data impacts individual privacy, and whether VI, asynchronous VI or other technological methods might be legally actionable as a violation of the law.

As COVID restrictions persist and limit external, employer-based opportunities, managing the resulting universal career shock requires the continued implementation of strategies that address multiple issues. Educational responses must include practical approaches that provide a meaningful alternative to traditional internships. Increasing student proficiency with VI processes and adding non-placement WIL opportunities, especially those like the ICI pilot project, are best practices. Integrating best practices with Career Center resources to provide a richer, more supportive, and realistic environment for students seeking to navigate career shock events.

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<sup>15</sup> Reflection before-, in-, and on action through settings, perceptions, information, clarification, emotions and empathy, and summary, strategies and support.

<sup>16</sup> See Bates and Stone (2020) for more information about the use of AI in VI.

## 6 Declarations

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### 6.2 Competing Interests

The authors certify that they have NO affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureau; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

### 6.3 Publisher's Note

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