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High-Flying Results: A Case Study in a Pilot Development Mentor Program

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Abstract

Consistently considered one of the world's most stressful occupations, the job of an airline pilot requires increasingly specific skills and responsibilities, especially amidst the global pandemic (Cullen, et al., 2020; Sew, et al., 2022). Given the severity and implications of their decisions and actions, airline pilots must continuously undergo training and practices to ensure proper procedure. In 2020, the Federal Aviation Administration (FAA) augmented qualifications by enacting Pilot Professional Development (2020) requirements (published in 85 F.R. 10896), including mentoring for newly hired pilots in command (PIC). In complement with 85 F.R. 10896, C.F.R. 14, 121-N ensures "techniques for reinforcing the highest standards of technical performance, airmanship, and professional development in newly hired pilots" in command (FAA, 2020; Training Program, 2020). Although meant to enhance skills and competencies, C.F.R. 14, 121-N allows for variability and discretion in implementation (FAA, 2020). This has led to diverse mentoring programs with mixed applications in mentoring across the industry. One specific airline mentoring program redesigned for intentionality and the expansion of the mentor mindset is the Horizon Air Pilot Development (PD) Mentor Program. Recognizing the need for mentoring to begin early in the employment process, the PD program underwent innovative formalization and restructuring to support Horizon Air core values and the belief that effective mentoring takes time to develop. Through the lens of mentoring research, this case study explores the novel processes, challenges, and best practices of the Horizon Air Pilot Development Mentor Program to gain additional insights about pilot satisfaction, future program development, and pilot recruitment and retention. Furthermore, this study offers results and impacts related to pre-employment pilot mentoring outcomes and presents a paradigm for the future of mentoring in the airline industry.

Keywords: airline pilot, pilot development, mentoring, training, retention

Introduction

Background

The global pandemic brought many challenges and changes to careers worldwide, generating fears of job security, safety, and stability (Nemteanu et al., 2021). Although COVID-19 impacted many occupations, one of the greatest affected was the airline industry. In a time when all superfluous socialization and travel seemed to come to a halt, a career designed to bridge distances and landscapes appeared defunct. Consistently deemed one of the most stressful occupations for decades (Cullen, et al., 2020; Sew, et al., 2022), the pandemic heightened airline pilot stress, bringing increased concerns and dissatisfaction (Charman, 2021). Research indicates that during the pandemic 43% of airline pilots reported that they would not recommend their career to youth (Charman, 2020). Alongside recruitment struggles, pilot retention suffered, with 54% of pilots indicating plans to change jobs within 12 months and 82% citing the pandemic as an impetus for their desire to change roles (Charman, 2021).

Amidst this backdrop and in response to previous airline accidents in the early 2000s, the Federal Aviation Administration (FAA) enacted Advisory Circular (AC) 121-43 in March 2020. AC 121-43 presents guidelines for following FAA C.F.R. 14, 121-N, aimed at "instilling and reinforcing the highest standards of technical performance, airmanship, and professionalism in newly employed pilots" (FAA, 2020, p. 2). Pilots in Command (PIC) are required to undergo yearly trainings focused on improving workplace competencies, skills, knowledge, and flight deck leadership; however, these trainings do not necessarily address the need for mentoring in the entry levels of aviation to ensure ongoing pilot success and retention.

Mentor Program Overview

Seattle-based Horizon Air (an affiliate of Alaska Airlines) is a U.S. regional airline, serving over 45 cities and employing over 4,000 individuals throughout the U.S. and Canada (Alaska Airlines, 2024). In 2016, predating AC 121-43 (FAA, 2020), Horizon Air established a Pilot Development Program (PDP) to support pre-employment pilots in their flight training. Shortly thereafter, an informal mentoring program was also established for members of the PDP. Rather than wait until pilots were working toward leadership positions, Horizon established the programs to ensure every incoming, pre-employment pilot was randomly assigned a mentor. Protégés were made aware of their match through email without ongoing monitoring or evaluation. As the program grew and leadership changed, it became clear that a more structured and intentional program was necessary to meet the needs of new pilots and offer effective mentoring. Thus, Horizon Air formalized the mentoring program component of PDP and created The Pilot Development (PD) Mentor Program. The newly defined program provides a path for individuals to become pilots with monetary support and offers a position as a Horizon Air First Officer upon program completion.

Purpose

Challenges of Becoming a Pilot

The purpose of this case study was to explore the impacts of the Horizon Air PD Program as it relates to pilot satisfaction. Additionally, it seeks to gain additional insight for future program development and improvement to aid in pilot recruitment and retention. A case study method was employed, as defined in Creswell (2009), to "address a description of the case and the themes that emerge from studying it" (p. 126). There are numerous factors that can impact pilot satisfaction and various barriers to entering the pilot career field. The primary training to become a pilot is not only strenuous, but also costs roughly \$100,000 (ATP Flight School, 2024). In addition to intensive flight training with high associated costs, pilots are also required to maintain a high level of emotional and physical health. Commercial pilots undergo health testing at least once a year and must also pass numerous competencies tests and exams to continue their careers. Due to the various factors that may affect a pilot in training, research indicates that roughly 80% of learner pilots drop out of their programs (Godlewski, 2023). In addition to the shortage of qualified, trained pilots who are eligible for hire, the world of flight training is experiencing a similar shortage of instructors. New flight students often deal with high turnover of instructors and little availability at flight schools. These limitations can cause training delays which may have other repercussions due to required timings of trainings. If a pilot is delayed past a required timed test, additional training with extra costs and resources can be incurred (Crouch, 2020). Therefore, it is imperative that new pilot protégés have the ability to connect with experienced pilots who may provide support, insight, and guidance on how to navigate the field successfully.

Similarly, another challenge in hiring airline pilots is the "1500-hour Rule." Enacted in 2010, The 1500-hour Rule increased the minimum flight time to earn an Airline Transport Pilot (ATP) certificate from 250 hours to 1500 hours, with some exceptions based on military and education (Airmen, 2024). Prior to this rule, pilots could work for an airline and apprentice with a senior captain to gain the additional required experience. This allowed for on-the-job training and skill development, as well as structured promotion. Since the enactment of the rule in 2010, however, pilots are required to remain in lower-paying, *time-building* jobs for a longer amount of time in order to gain the necessary flight experience (Airmen, 2024). Without the supervision/oversight of an airline training department, having a mentor is especially important

in the development of these aspiring pilots. The availability of a mentor to discuss possible lowtime pilot jobs and tips for time-building can help new pilots fulfill these hour requirements more quickly while giving them a support system. Also, mentors for these pre-employment pilots can promote the values outlined in AC 121-43 (FAA, 2020) of technical performance, airmanship, and professionalism.

In addition to the cost and time commitment, the career of a pilot is intensely challenging due to its risks. Pilots must make personal judgments that affect the lives of passengers, other pilots, and civilians, placing strong psychological demands on the profession (Mulder & de Rooy, 2018). This pressure requires constant learning, training, and certification as a means of developing industry-specific skills and experience. The additional stress and obligations require an exceptional level of awareness that necessitates new and current pilots receive psychoemotional support with specific goals and outcomes for their well-being. The airline industry has a high need for peer support, and although many airlines offer mental health programs for employed pilots, attrition at the regional airline level can have socio-emotional repercussions and make lasting relationships particularly challenging. As the global industry has begun experiencing a shortage of pilots, major airline hiring has increased recruitment, and the regional airlines are commonly used as temporary employment by pilots to gain airline experience before they apply to a major airline a few years later. This high turnover rate means that a pilot who is volunteering for a leadership position may only be at the company for a few years, and thus will have a finite amount of time to build a meaningful relationship.

Horizon Air Preliminary Mentoring Program

Although well-intentioned in its efforts to help new pilots transition to the airline and address some of the aforementioned challenges, the preliminary Horizon Air Pilot Development Program (PDP) lacked intentionality in practice and fundamental design. Without a structured program including clear expectations and a system for monitoring and evaluation, the program was considered ineffective by both mentors and protégés who reported a lack of engagement and connection.

Prior to restructuring, the Program Managers of the PDP faced issues with recruitment and retention of mentors, low interest in volunteering, little engagement with protégés after initial contact, and high turnover rates. As the program had little formality and unclear goals, it was often unsuccessful in attracting new mentors. Very little time was set aside for outreach to prospective mentors and the program relied mostly on referrals from upper management. Upon signing up as a mentor, no formal training or explanation of mentoring was given to new mentors, and no follow-up was conducted after assigning protégés. Mentors were not trained in proper outreach methods, code of conduct, or engagement requirements. In addition, no formal process for tracking mentor involvement and resignation existed, leaving the program particularly vulnerable to the high turnover rate experienced by regional airlines. As pilots accepted jobs at major airlines, they would leave with no word to their protégés or the program

Furthermore, the initial PDP with mentoring failed to implement strategies surrounding its core values, which are shared with Alaska Airlines (of which Horizon Air is a wholly-owned subsidiary): Own Safety, Do the Right Thing, Be Kind-Hearted, Deliver Performance, and Be Remarkable. Alaska Airlines and Horizon Air are proud of these core values; yet the original mentor program neglected to connect these values and sense of community with new pilots. Thus, although meant to enhance new pilots' experiences and training, the initial mentor

program was not based on best practice, which was reflected in low pilot engagement and unclear outcomes.

Innovative Industry Mentoring

Within the aviation industry, mentoring remains a requirement and a necessity in assisting pilots' development of skills and affective needs. Mentoring is recognized as a tool for increasing employee performance, productivity, satisfaction, and retention (Natzel, 2020; Shah, et al., 2016). In fact, studies have shown that employee turnover has been reduced through formalized mentoring and coaching interventions within organizations (Ezeokeke, 2011). However, to be effective in reaching specific organizational goals, the mentoring practices must intentionally align with methods and purpose. FAA AC 121-43 provides examples that align with mentoring best practices, including psychological issues, career development, and role modeling (FAA, 2020; Schwiebert, 2000). However, the FAA guidelines lack instructions for formalization, frequency, or feedback. Furthermore, they allow for latitude in implementation and approach, providing a shallow description of communication, skills, and considerations, evincing an informal framework for mentoring interactions. These guidelines, though helpful in ensuring mentoring practices, do not ensure a formalized approach.

Research confirms that informal mentoring relationships, such as the initial Horizon Air mentor program, focus on lower-level developmental needs, whereas formal mentoring allows for deeper and enhanced learning (Ragins et al., 2000). Likewise, formal mentoring requires discussions surrounding specific objectives that provide structure early in the relationship with meaningful communication (Cohen, 1995). When mentors and protégés feel a mutual commitment and invest time in training, shared resources, personal connections, and networking, the perception of the mentoring relationship quality increases (Astrove & Kraimer, 2022). For

this reason, the Horizon Air PD Mentor Program was designed with a formalized framework meant to bring structure and tangible positive outcomes to mentors, protégés, and the industry.

The PD Mentor Program evinces best practices for mentoring by focusing on relational needs and integration of coaching strategies for professional development skills. Successful mentoring includes experienced mentors who serve as advocates, set tasks, engage in discussion, share experiences, and model roles (Daloz, 1999). Mentors interpret the environment for protégés so that learning is retained and transferred into practice (Cohen, 1995; Klasen & Clutterbuck, 2002). Within the PD Mentor Program, experienced pilots engage in coaching strategies through sharing knowledge and resources off the flight deck, so that novice pilots can implement the skills when in the field. This intentional sharing of experiences, as well as coaching skills, fosters independence, autonomy, and productivity through a focus on performance planning and teamwork (Murray, 2001; Schweibert, 2000). Furthermore, the relational mentoring strategies enhanced with coaching techniques meet the FAA guidelines and align with best practice.

Research across the airline industry has demonstrated the need for psychosocial support both personally and professionally (Mulder & de Rooy, 2018). The FAA (2020) guidelines for mentoring in AC 121-43 outline mentoring as a pairing in which a less experienced individual (protégé) seeks advice, encouragement, guidance, and support from their mentor. Perhaps as important, however, mentoring is meant to be a mutually beneficial process in which protégé *and* mentor gain understanding (Schweibert, 2000). Mentoring provides a platform in which mentors and protégés can benefit from shared resources, care, and professional interactions. Likewise, evidence supports that reverse mentoring occurs when more experienced (often older) employees seek and learn technical skills from protégés (Astrove & Kraimer, 2022). Thus, within

formalized mentoring relationships, mentors can gain increased interpersonal skills, enhanced understanding, and greater workplace satisfaction alongside their protégés' development (Astrove & Kraimer, 2022). This concept translates into gained professional skills for PIC's and pilots-in-training in the Horizon Air Mentor Programs.

To gain all the proven benefits of mentoring, the Horizon Air Pilot Development Program (PDP) was re-designed with a sharp focus on mentoring formalization and best practice, using the FAA recommended text, *Designing Workplace Mentoring Programs: An Evidence-Based Approach* by Finkelstein et al. (2009). In addition, the mentoring program was intentionally designed to meet the International Mentoring Association (IMA) Program Standards. The framework includes mentoring standards of Clear Vision of Program Scope, Clear Roles and Responsibilities for Leadership, Mentoring Selection and Assignment, Mentor Professional Development, Formative Assessment, and Program Evaluation (IMA, 2023). Following these guiding principles, the program underwent a transformative overhaul in Fall 2021, seeking intentional goals and outcomes to support and promote new-hire first officers and pilot development students. The Horizon Air PD Mentor Program is innovative within airline industry pilot mentor programs given the level of formalization and intentionality that demonstrate the best practices and insights outlined in this report.

Procedure

Redesign and Implementation of Horizon Air PD Mentoring Program

Re-established as a formalized mentoring initiative in Fall 2021, the Horizon Air Pilot Development (PD) Mentor Program is a formal mentor program designed to support members of the airline's two pre-employment developmental programs: the Pilot Development Program and the Ascend Pilot Academy (APA). While 14 C.F.R., 121-N (Training Program, 2020) necessitates mentoring training for all pilots-in-command (PIC's), Horizon Air leadership chose to form specific mentoring programs for pilots at initial phases of their careers. These programs, which were created to provide a path for individuals to become pilots at Horizon Air, offer successful candidates monetary support and a position as a First Officer.

The Horizon Air PD Mentor Program is overseen by a Steering Committee of senior leadership at Horizon Air and Alaska Airlines who advise the Horizon Air Pilot Mentor Program. Departments represented on this committee include Flight Operations (Horizon Air); Training (Horizon Air); Human Resources/Talent Acquisition (Alaska Airlines); Diversity, Equity, and Inclusion (Alaska Airlines); and Safety (Horizon Air). The Program Managers met with the committee on a periodic basis to discuss and resolve various program issues. The organizational structure includes a *Mentor Leadership Team* composed of Program Managers, and an *Outreach and Engagement Team* (OET). Program Managers are responsible for the management and oversight of all pilot mentor programs, including the PD Mentor Program. The OET assists the Program Managers with administrative tasks and oversight of the mentor programs.

Mentors within the PD Mentor Program are Horizon Air and Alaska Airlines pilots who have volunteered to be mentors and who have completed the required training, orientation, and documents. Protégés (or mentees) are members of the Pilot Development Program and Ascend Pilot Academy who have requested a mentor via the Protégé Questionnaire. Participation in the PD Mentor Program is optional; however, an important element of the program is that all participants are offered a professional pilot mentor. These protégé-mentor relationships are especially important because program participants are generally low-time pilots, many of whom have never had access to aviation professionals. Furthermore, many of these pilots come from backgrounds that have historically been under-represented in the airline industry. Thus, the Horizon Air PD Program is intentionally using mentoring to address recruitment and retention needs facing the industry.

The PD Mentor Program is designed to provide any Horizon Air pilot with the opportunity to be a mentor. Once selected, they watch a training video and complete an orientation with the Mentor Leadership Team. Due to the high number of pilots in the program (nearly 800) and the periodic turnover of mentors, continual mentor recruitment is essential for the success of this program. Efforts to promote recruitment and visibility include maintaining a mentor program site on the company's internal website, periodically hosting office hours in Horizon Air crew rooms, providing a lapel/lanyard pin to members of the PD Mentor Program, encouraging referrals from mentors, encouraging program involvement by the Training Department, and contacting and discussing the program with First Officers who are former members of the Pilot Development Program or Ascend Pilot Academy after they have completed their Initial Operation Experience. These practices were implemented in an effort to formally initiate the relationship phase of the mentoring process (Cohen, 1995). Through intentional matching and recognition, Horizon Air and Alaska Airlines demonstrate their commitment to valuing the time and talents of their mentors. The organization's investment in training, lapels, recruitment, and visibility provides mentoring practitioners with recognition and structure to increase their confidence in their practice.

The Alaska Airlines Talent Acquisition Department periodically provides the Mentor Program Managers with a list of new program members. Upon receiving these names, a member of the Mentor Leadership Team sends an introductory email to each new member and includes a link to the Protégé Questionnaire. This questionnaire is used to determine whether they would

like a mentor and, if so, any specific preferences for their mentor pairing and support. Upon receipt and review of the Protégé Questionnaire, the Mentor Leadership Team then references the Mentor Profile document to find a compatible mentor. This document includes information about each mentor including background, residence, schools attended, interests, type of mentor support offered, and number of desired protégés with whom to partner. Mentors are also encouraged to request protégés with whom they have experience working or feel strongly about supporting (e.g., African Americans, women, military veterans, etc.).

In alignment with best mentoring practices, efforts are made to pair mentors and protégés who live within close geographical proximity, as research suggests that in-person contact leads to a stronger rapport and more frequent contact (Finkelstein et al., 2009). While in-person contact is not always feasible within the aviation industry, research also supports the efficacy of virtual mentoring in professional growth and motivation (Evans, 2018; Owen, 2015); therefore, an emphasis on face-to-face contact such as video meetings is made, especially in the early stages of the relationship. Once a possible mentor has been identified, the Mentor Leadership Team will provide the proposed mentor with the protégé's questionnaire responses. If the mentor agrees that the protégé would be a good fit, the mentor will be designated as the protégé's official mentor. If a protégé-mentor pairing is later determined to be a mismatch, efforts will be made to find a more suitable pairing. This deliberate mentoring practice improves upon earlier models which lacked intentionality in mentor/protégé matching. The new matching system provides a firm foundation for pairs to begin building a relationship with support. In alignment with mentoring research, relationships may last anywhere from six months to several years.

Developing skillful mentors is essential to the success of the PD Mentor Program. The Program Managers continually seek to develop training programs and offer resources that further

Horizon Air pilots in their growth as mentors. Initial mentor training for the PD Mentor Program consists of watching a video created for the program by the Diversity, Equity, and Inclusion Department. This video discusses, among other things, concepts of identity, empathy, and perspective. Orientation also includes a mentor interview with a Program Manager and an OET member to discuss mentoring concepts, qualities of successful mentoring structure and processes, program expectations, personal boundaries, safety, and lessons learned. Additionally, the interviewers review the various documents the mentor must uphold and maintain. The Program Managers also periodically host online Pilot Mentor Meetings, which include news and updates, guest speakers, discussions regarding the mentor program, and open forums. They also share documents and resources (e.g., book titles and scholarly material) with the mentors to promote continued learning and program feedback. Furthermore, the Horizon Air Training Department provides training courses that include training in mentorship to all Horizon Air pilots. This training is provided independently of the Horizon Air PD Mentor Program and includes Crew Resource Management (CRM), an initial qualification course for newly hired First Officers. This ten-hour, two-day course is separate from mentor training and includes mentoring concepts designed to increase knowledge and awareness of leadership, mentorship, and followership throughout the pilots' time at Horizon Air.

Unlike the original implementation, the redesigned PD Mentor Program seeks to directly incorporate and uphold Horizon Air and Alaska Air Group core values: Own Safety, Do the Right Thing, Be Kind-Hearted, Deliver Performance, and Be Remarkable. To this end, mentors are expected to serve as role models, establish goals for the relationship, and maintain consistent, regular contact with their protégé. Within the revised PD Mentor Program framework, mentors must contact their protégé within one week of being paired via company email. In the initial email, the mentor provides basic information regarding their involvement in the program and requests to schedule a meeting (either in-person or virtually through Teams or a phone call) to further connect. If no response is received, the mentor follows up with a text or phone call. If no response is forthcoming from these initial outreach efforts, the mentor reaches out to Program Managers for further assistance. Although the program is voluntary, it is formalized, and mentoring research supports that programs should establish minimum required contact to encourage the meeting of protégés and mentors (Finkelstein et al., 2009); therefore, the minimum required contact for each protégé is quarterly. Mentors record interactions on a Protégé-Mentor Pairing List affirming positive two-way contact with their protégé and any pertinent notes (not of a sensitive nature). If an entire quarter passes with no protégé communication, the mentor informs program managers for further follow-up.

Horizon Air's formalized PD Mentor Program was created to demonstrate organizational support of its current and future pilots and foster a strong sense of community and inclusion. Mentors understand the need to respect their own and the protégés' personal boundaries, including appropriate hours for contact. In general, questions and conversations are regarding the protégés' professional success and well-being. This does not inhibit mentors from sharing personal accounts and details as they see fit, but mentors reserve the right to withhold personal information they feel uncomfortable sharing or do not see as pertinent to the relationship. If a mentor has concerns regarding their personal safety, they are directed to discontinue the relationship, effective immediately. The mentor notifies the Program Managers as soon as possible, so that they can coordinate additional actions.

As noted earlier, airline pilot retention remains a challenge for many airlines (Charman 2021). If a mentor is planning to leave Horizon Air, they are encouraged to notify the Program

Managers of their plans to leave as soon as possible so that the Program Managers may begin the process of re-pairing the mentor's protégés. Rather than the inconsistent and in some cases nonexistent reassignment process executed in the initial mentor program, the restructured practice offers a proactive method of communication, outreach, and relational awareness to increase retention. Likewise, if a mentor transfers to Alaska Airlines, they are encouraged to remain an active mentor in the program. Alaska Airlines pilots are welcome to be mentors, provided they can communicate with the Program Managers and access all required documents (e.g., Protégé-Mentor Pairing Spreadsheet). This collaboration allows for greater program stability to lessen the impact of pilot turnover and allow for continued mentoring relationships and growth.

Mentor Program Findings

Although no data was formally collected in the mentoring program prior to its restructuring in October 2021, the restructured Horizon Air PD Mentor Program employed a case study method of research to explore the impacts of the program in pilot satisfaction and to gain additional insights for future program development and improvement in pilot recruitment and retention. In this current study, themes were explored from program assessments to ensure that the protégés and mentors begin the relationship successfully, continue to meet regularly, and make progress towards the protégé's goals (Finkelstein et al., 2009). The Protégé-Mentor Spreadsheet is the principal method for monitoring the program. The spreadsheet is reviewed on an ongoing basis by the Mentor Leadership Team to ensure consistent contact is being made, expectations are being met, and there are no issues or concerns noted. Approximately every six months, the Mentor Leadership Team will send a questionnaire to each mentor. The questionnaire assesses the effectiveness of the program and seeks the mentor's insights and experience gained. The results of these questionnaires are reviewed and incorporated into the PD Mentor Program interview questions and training as needed.

An earlier iteration of protégé and mentor feedback included broad questions such as: Have you had a positive mentoring experience; what is going well about your relationship; and do you have any suggestions for improving the Mentor Program? In an effort to improve data, protégé feedback questions now include a Likert-scale survey that asks respondents to select *Strongly Agree, Agree, Disagree*, or *Strongly Disagree* to twelve questions such as: I feel comfortable discussing personal issues with my mentor; I feel as though having a mentor has helped me grow in my aviation career; I feel as though having a mentor has given me a sense of belonging in the aviation community; and I feel as though my mentor has been willing to support me in my goals. Likewise, mentors are issued a ten-question survey in a Likert-scale format with the same response options for questions such as: I feel as though being a mentor has helped my personal growth; I feel as though being a mentor has positively contributed to my aviation career; I feel fulfilled in helping my proteges overcome work-related challenges, etc.

In addition to the Likert-scale surveys, mentors of the PD Mentor Program submit an open-ended qualitative questionnaire that is distributed every six-months and asks respondents to share feedback to questions such as: What is going well about the relationship, and what have you learned?

Through this engagement, the TA Department ensures, among other things, that any member who has any needs or issues concerning the PD Mentor Program can be quickly connected to someone from the program. Additionally, the Program Managers maintain ongoing communication with this department. Any issues or concerns expressed by protégés can be shared with the TA Department, in accordance with the requirements of this program. The

Program Managers pursue these feedback measures to ensure the effectiveness of the PD Mentor Program.

Results

The results of the newly structured program have proven efficacious. Within the Winter 2023 quarter, over 485 protégés completed the questionnaire, with 72% agreeing/strongly agreeing that their mentor has been helpful in their training and/or professional development. In addition, 82% reported feeling that their mentor made time for them and answered their questions. In the Spring 2024 quarter, 503 protégés responded to the survey, with 95% reporting feelings of having a positive mentoring relationship and 81% responding *Agree* or *Strongly Agree* to feeling as though their mentor increased their personal development *and* professional development. Likewise, 91% of protégés responded with *Agree* or *Strongly Agree* that having a mentor improved their confidence level in completing the pilot training program. Furthermore, within the PD Mentor Program, there was a 27% increase in contact rate from 2022 to 2023, and an almost 4% increase in response-rate interaction from the final quarter of 2024 to the first quarter of 2024. Thus, program formalization has increased mentor/protégé contact and has also shown dramatic increases in engagement.

Mentor feedback was collected only through a qualitative questionnaire in the Winter 2023 quarter. However, in congruence with the positive protégé results in the Spring 2024 quarter survey, mentors demonstrated an 80% response rate, and 99% of mentors cited feeling as though they positively contributed to their protégé professional development. Ninety-nine percent of mentor respondents also indicated that they feel as though serving as a mentor positively impacted their personal *and* professional growth.

Qualitative feedback has demonstrated equally positive results. Mentors *and* protégés have reported high program satisfaction, with feelings of purpose, growth, satisfaction, and personal/professional reward. Mentors have reported an increase in sense of community, such as "the experience has been meaningful simply in fostering a sense of community with our future pilots," and "Another thing I really like about being part of the Pilot Development mentor program is that I can share our Horizon culture with future pilots and make a positive impact on their view of our pilot group." Additionally, pilots have shared personal growth in serving as a resource and continuing their own development. As one pilot noted, "it continues to spark my own love for this profession."

Participating pilots have also demonstrated personal growth in necessary career skills such as communication, appreciation for diversity, and interpersonal capabilities. For example, one pilot shared, "I have learned, while being a mentor, that being the one to initiate communication is key. They know they can reach out to me, but sometimes it takes starting the conversation to get them to engage in longer conversation." Another pilot said,

Two of the biggest skills I have personally developed and improved have been my communication and organization. Being a mentor has allowed me to work with pilots from many different backgrounds, which means that they all usually communicate in different ways. A key I have discovered is finding how your protégé prefers to communicate and adapting to that to ensure a positive relationship.

Additionally, the mentor program has highlighted the value of multi-experience relationships, diverse perspectives, and interpersonal awareness. One pilot explained,

I think the biggest thing is just being able to be there for any questions and sometimes just reassurance [that] they are not alone. For most on the list, it's their first big aircraft they'd be going to, or they are just not sure what to expect flying part 121 for the first time. A lot of unknowns, which is understandable and can be unnerving. So we just talk normal stuff. I have even talked just luggage with one protégé. I honestly wish I had someone to ask that when I first started.

As the pilot mentor states, having someone to ask questions is an important resource, especially for pilots-in-training. The protégés in the PD Mentor Program report feelings of being "really supported" by their mentors. In fact, many protégés use the word "valuable" when describing their interactions with their mentors. One stated, "My mentor from Horizon has also been a valuable resource as I establish goals for each step." Another claimed, "I reached out to him with a question, and I think that's a valuable aspect of this program." Additionally, protégés anecdotally reported relationship building and interpersonal connections with their mentors: "My pilot mentor has regularly contacted me and has been great to chat with about my progress." What's more, the mentoring relationships have allowed for deeper connections as some pilots and protégés have intersected geographically at training locations, which have built upon their shared experiences.

Discussion and Future Implications

The positive reports from pilot mentors and protégés participating in the PD Mentor Program align with research related to the mutual benefits and reciprocity of mentoring. As data demonstrates, the exposure to and strengthening of professional skills and interactions is manifested through mentoring experiences (Astrove & Kraimer, 2022). Likewise, these feelings of support are important to a mentoring relationship and demonstrate a sense of connection (Trees, 2016). The mentor and protégé feedback illustrate the ways in which the Horizon Air PD Mentor Program is adding to the benefits of mentoring in a unique field and industry. The need for mentoring is recognized by the FAA and supported through efforts such as those undertaken by Horizon Air and Alaska Airlines. Thus, as mentor and protégé feedback attest, the PD Mentor Program aligns with mentoring data and is filling a needed gap in professional and relational skills of current airline pilots in command and pilots-in-training.

The information gleaned from this exploratory case study continues to help shape and improve the Horizon Air mentor programs. Additional attention is being paid to the positive psycho-emotional impacts of the mentoring relationship and mentoring's impact on appreciation for diversity. As the airline industry continues to evolve and expand in diversity, more attention to diversity, equity, and inclusion (DEI) initiatives remains a priority for Horizon Air. Data supports that "organizations that don't provide coaching or mentoring are significantly more likely to struggle with their DEI goals" and "were 63% more likely to report struggling with providing equitable pay, 58% more likely to report struggling with providing promotions, and 33% more likely to report struggling with retention" (Torch Leadership Labs, 2022). As Horizon Air seeks to address recruitment and retention needs, the mentoring program can help ensure that attention is also being paid to different areas of the industry that impact diversity such as DEI goals and pay structures.

Within the Horizon Air PD Mentor Program, increased efforts are also being made to enhance mentor and protégé connections through the encouragement of more in-person meetings. Although it can be challenging to meet face-to-face, especially for pilots who travel often, mentors and protégés have expressed deeper connections and meaningful mentoring relationships through personal interactions. There is also the intention within the formalized program to add more assistance with mental health training for mentors to meet mentor and protégé needs. Increased peer support can lead to further collaborations and a culture in which pilots are not afraid to share mental health needs (Mulder & de Rooy, 2018). This intentional intervention through the Horizon Air PD Mentor Program can have implications across the industry and lead to collaborative sharing of mental health and well-being practices within the industry that are in line with the philosophy of mentoring. Moreover, the present results of pilot satisfaction attest to the positive effects of the mentoring program and carry broad implications for the industry in terms of pre-employment pilot retention and recruitment through the fostering of community and commitment to organizational core values. The Horizon Air redesigned model provides a paradigm for other airlines who may be interested in pilot pre-employment best practices and mentoring.

Conclusion

According to the U.S. Bureau of Labor Statistics (BLS), the employment of airline/commercial pilots is expected to grow at a rate that is as fast as the average across all occupations. With a projected 4% pilot employment growth from 2022-2032, the airline industry is expected to have almost 17,000 job openings per year (BLS, 2024). In fact, the Bureau of Labor Statistics is projecting high rates of necessary employment over the next decade across a moderate-term, on-the-job training environment. For this reason, mentoring remains a crucial intervention throughout the industry. Research demonstrates that, "In addition to mentoring being a powerful recruitment and retention strategy, it can bring operational improvements around productivity, skill development, cross-organizational knowledge sharing, teamwork and leadership development" (Natzel, 2020, p. 2). Moreover, mentors versus non-mentors report being more satisfied with their careers (Ghosh & Reio, 2013) and more engaged (Association for Talent Development [ATD], 2021). This has been presently supported and evinced in the Horizon Air PD Mentor Program.

Thus, the Horizon Air Pilot Development Mentor Program serves as a paradigm for best practice in mentoring throughout the airline industry. Although initially not formalized, the restructured program demonstrates the investment in pilots and aims to fulfill its goals of improving airline pilot recruitment, retention, culture, satisfaction, collaboration, and training. As the airline industry continues to develop with increasing needs and decreasing employees, the exigency for formalized mentoring programs, rooted in mentoring research and philosophy, has perhaps never been so great. Especially post-pandemic, the human need for connection and care necessitates programs designed for employee betterment. The Horizon Air PD Mentor Program provides its pilots a positive, lasting impact on mentors, protégés, and the airline industry overall.

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