[Relational Mentoring in the Aviation and Aerospace Industry: meeting women's needs through the alta mentoring scheme]

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ABSTRACT:

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- 1. Relational mentoring
- 2. Aviation and aerospace industry
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- 4. Barriers
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Main Body:

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Introduction

The alta mentoring scheme, launched within the aviation and aerospace industry on International Women's Day, 8th March, 2019, is the outcome of a joint knowledge exchange project between academics at the University of the West of England and industry partners (The Royal Aeronautical Society (RAeS), Airbus, the Royal Air Force and Little Blue Private Jets Limited). The collaboration was jointly funded by the ESRC Knowledge Exchange Fund (£65,497.00 ES/M004775/1) and match funded by the industry partners.

Alta was designed and launched to meet the mentoring needs of women in this male dominated industry, who otherwise had no, or very little mentoring support. It currently operates as a formal mentoring scheme, via a digital platform, by the RAeS, as part of its careers support for women in the industry. The aim of alta was to create an on-line mentoring platform based upon the mentoring support that women identified as being important and that would address their under-representation and the lack of support for career progression. This was an important step in such a male dominated industry to tackle the recruitment and retention challenges in an industry that was already experiencing a chronic skills shortage and to help to retain those women already working in the industry.

The knowledge exchange project was under-pinned by six months of research across the industry (a survey, interviews and focus groups with professional women and employers) to ascertain both the need for the mentoring scheme and to determine what women wanted from it. This chapter is based upon four focus groups held with women across the industry, in both

technical and middle/senior managerial roles, to explore their experiences and perceptions of the benefits and barriers to mentoring. The focus groups were also utilised to find out specifically what women wanted from alta.

Theoretically, the chapter draws upon a feminist relational mentoring framework (McGuire & Reger, 2003; Ragins, 2016), that views mentoring as a two-way process where both mentors and mentees learn from each other, mutually benefit from the mentoring relationship and where mentors empower, rather than protect, their mentees, while striving for gender equality in a male dominated industry. This underpins the focus of the alta mentoring scheme. The central tenet upon which alta was designed – to ask women in the industry to identify what they wanted from an industry-wide mentoring scheme – was the ultimate way to empower women in the industry. The chapter also draws upon a body of literature focusing upon the benefits of mentoring (e.g., Kim Im & Hwang, 2015; Phillips, Dennison & Davenport., 2016) and barriers (e.g. Eby, Butts, Durley & Ragins, 2010; Parise and Forret, 2008); as well as gender specific mentoring (e.g. Johns & McNamara, 2014; Meyerson & Fletcher, 2000). The chapter begins with a review of the extant literature on mentoring and the relational mentoring theoretical perspective. This is followed by an overview of the aviation and aerospace industry in the UK and the alta mentoring scheme. After an explanation of the methods utilized for the study, the findings from the focus groups are presented in relation to women's experiences of mentoring, what they see as the benefits and barriers to mentoring

The Benefits of Mentoring

The business case for mentoring is well established. Mentoring has been linked to increased retention, especially among minority groups (e.g. Phillips et al., 2016), and reduced turnover intentions (Blake-Beard, 2001; Kim et al., 2015). From the point of view of mentees, many

and what they were looking for from the alta mentoring scheme.

benefits have also been identified: career advancement (Singh, Ragins & Tharenou, 2009; Turner, Gonzalez & Wood, 2008), more promotions (Scandura, 1992), higher incomes (Dreher and Cox, 1996), greater job and career satisfaction (Kammeyer-Mueller & Judge, 2008; Underhill, 2006; Van Vianen, Rosenauer, Homan, Horstmeier & Voelpel, 2018), opportunities to develop competencies and skills (Hansford et al., 2004), as well as increased resilience (Kao, Rogers, Spitzmueller, Lin & Lin, 2014). Mentoring helps mentees achieve a 'sense of belonging' (Laverick, 2016) and generate perceptions of organisational support (Baranik, Roling & Eby, 2010), which are crucial inclusivity factors, especially for underrepresented groups in organisations (Durbin, 2015).

Mentoring has also been found to bring benefits to those who mentor, such as learning, personal gratification and enhanced relationships, managerial skills (Eby & Lockwood, 2005), access to new ideas and personal growth (Hansford, Ehrich & Tennent, 2004).

Mentoring others can alleviate perceptions of career plateaus (Rotondo & Perrewe, 2000) and restore valuable resources (Wang, Hu, Hurst, & Yang, 2014). A comparative study (Allen, Lentz & Day, 2006) has shown that those who mentor others report greater salary, promotion rates, and stronger subjective career success than those who do not.

The Barriers to Mentoring

While the positive gains from mentoring are clear, some negative aspects have also been identified, such as lack or poor planning of the mentoring process; poor matching of mentors and mentees; lack of understanding about the mentoring process; lack of time for mentoring; and lack of mentors from minority groups (Long, 1997). Negative mentoring experiences such as mentor self-absorption, incompatibility between mentor and mentee, manipulative behaviours by the mentor, poor mentor interpersonal competency skills, and mentor neglect have also been noted (Eby e al., 2010). Waxman, Collins and Slough (2009) warn of the

existence of 'pseudo-mentors', who are focused on their own agenda, rather than the mentee's needs.

Negative mentoring experiences are more likely to occur where the mentee perceives the mentor as having dissimilar attitudes, values, and beliefs to their own (Eby et al. 2010). Mentees and mentors have also been found to see incompatibility based on factors such as race or gender as impediments to the success of the relationship (Hansford et al., 2004). Negative experiences have a significant effect on mentor and mentee's willingness to maintain the relationship and those who experience negative experiences are less likely to engage with mentoring in the future (Eby et al. 2010).

Potential drawbacks may deter those in senior positions to volunteer as a mentor due to risks to one's own reputation if the mentee does not perform well (Ragins & Scandura, 1999); time devoting to mentoring may be perceived as too much or as having 'opportunity costs' (Parise & Forret, 2008), with geographical distance and scheduling problems potentially exacerbating this perception (Eby & Lockwood, 2005); fears of being 'backstabbed' by a mentee (Allen, Poteet & Burroughs, 1997); and fears of being accused of nepotism by nonmentees (Ragins & Scandura, 1999). However, when mentors participate voluntarily, they are less likely to perceive mentoring as 'more trouble than it was worth' (Parise & Foret, 2008, p.236) and more likely to see it as a worthwhile, rewarding experience. Management support for formal mentoring schemes also impacts how mentors assess the experience (Parise & Foret, 2008).

Types of mentoring

Mentoring can be formal or informal. Informal mentoring is initiated spontaneously, and mentors and mentees meet when they please, meaning that mentors and mentees tend to have time to develop trust (Mezias & Scandura, 2005). However, informal mentoring is not

equally available to all. Women are less likely than men to have an informal mentor in male dominated industries (Dashper, 2018).

Formal mentoring schemes have several key design elements, such as a process and criteria to match mentors and mentees (Eby & Lockwood, 2005), usually some form of training, typically a limited time frame (Scandura & Williams, 2001) and are also usually off-line, that is, outside line management. Formal schemes also tend to target particular groups, such as trainee graduates, those who are identified as having talent or leadership potential. Other groups are often not included. For example, Curran et al. (2019) highlight the needs of mid-career academic women, which are often ignored. However, formal schemes tend to be more diverse and inclusive (Durbin, 2015).

Gender specific mentoring

Mentoring is beneficial for women at all stages in their careers (Ehrich, 2008; Singh, Bains & Vinnicombe, 2002; Vinnicombe & Singh, 2002, 2003), especially in terms of career advancement (Durbin & Tomlinson 2014;). Mentoring can facilitate the exchange of tacit knowledge and information that is often linked with promotion opportunities (Durbin, 2011; Swap, Leonard, Shields & Abrams, 2001). Therefore, mentoring is of particular significance for women as it can help them to break through the 'glass ceiling' (Lineham & Walsh, 1999). Mentoring increases women's visibility within organisations (Hersby, Ryan & Jetten, 2009) and contributes to raising women's aspirations and levels of self-confidence (Institute of Leadership and Management, 2011).

However, there is evidence that groups who are in a minority, such as women in male dominated industries, are less likely to have access to mentoring (Graham, 2019; Grant & Ghee, 2015; Zambrana et al., 2015). Singh, Ragins and Tharenou (2009b) found that members of non-dominant groups are less likely to be seen as rising stars and therefore less

likely to have access to informal mentoring – highlighting the importance of formal mentoring schemes and their role in 'levelling the field' for specific groups, such as women in male dominated sectors.

Furthermore, research suggests that mentoring is more effective for women when they are mentored by another woman (Leck, Elliott & Rockwell, 2012). Women who are mentored by other women receive more psychosocial support (Okurame, 2007) and career-development support than those mentored by men (Fowler, Gudmundsson & O'Gorman, 2007; Tharenou, 2005).

Relational Mentoring

The ethos of the mentoring scheme on which this chapter is based is aligned to the principles of relational mentoring. Relational mentoring (Ragins, 2012) is based upon relational cultural theory, first developed by feminist psychologists (e.g. Miller, 1976). This theory proposes that personal growth occurs through connections (relations) and that 'growth-fostering' relationships are based on mutual empathy and mutual empowerment (Jordan & Hartling, 2002).

Relational mentoring is a critical response to traditional mentoring based on hierarchical structures. It assumes that both mentor and mentee have "something to offer and gain from the other" (McGuire & Reger 2003, 55). Relational mentoring acknowledges that mentors can also learn and grow from the mentoring relationship (Ragins, 2012). Within this approach, the mentor is not viewed as the 'teacher', 'counsel' or 'protector', as is the case in traditional mentoring conceptions. Mentoring is instead viewed as bidirectional (Gammel & Rutstein-Riley, 2016), that is, as a "two-way street" where both "mentors and proteges actively learn and grow from each other" (Ragins, 2016, p. 232). In this relationship the

mentee is not dependent on the "all-powerful" mentor but is interdependent and the relationship becomes a 'safe-space' (Ragins, 2016).

The aim of relational mentoring is to foster an equal balance of power between mentor and mentee (McGuire & Reger, 2003). In the mentoring relationship, the mentor has a degree of influence on the mentee from the start. Relational mentoring encourages the protégé to develop the empowering feeling that they also have some impact on the mentor as the relationship is mutually influential (Fullick-Jagiela, Verbos & Wiese, 2015). Relational mentoring theory posits that trust and disclosure are important ingredients to building the quality of relationships (Ragins, 2012): friendship, nurturance, open-mindedness, and trustworthiness are key to successful mentoring relationships (Beyene, Anglin, Sanchez & Ballou, 2002).

The Aviation and Aerospace Industry

The aviation and aerospace industry is worth £58bn and employs 2 million people (Department for Transport, 2018) but suffers from a chronic skills shortage, which could be partly addressed through the recruitment and retention of more women. Women comprise just 10% of engineers, 6% of commercial pilots and 3% of airline Chief Executive Officers (Korn Ferry, 2019; WISE, 2018). The International Civil Aviation Organisation (2019) forecasts that air traffic will double by 2034, which means that twice the number of pilots, air traffic controllers, engineers and cabin crew will be required.

In a recent survey, 49% of female respondents cited the lack of opportunities for advancement in aviation as a critical inhibitor (Korn Ferry 2019). Women often do not progress due to a lack of role models or because they are confined to roles deemed more suitable for men. Many companies are trying to redress the balance and attract more women to aviation careers, promote diversity and prevent or address harassment. For example,

Airbus supports programmes aimed at attracting and retaining women; GE Aviation has an action programme designed to support and mentor female engineers throughout their career and GE launched Balance the Equation, with a goal of hiring 20,000 women in technical roles by 2020.

Airlines including British Airways, Virgin Atlantic and EasyJet, promote diversity amongst their workforce with the aim of achieving gender equality and Alaska Airlines runs a programme in which leaders discuss how men can support and advance women in the workplace (Seligson, 2019). Virgin Atlantic have created a 'Be Yourself manifesto' which outlines a number of initiatives to create an inclusive place to work. In 2018, they became signatories of the Women in Aviation and Aerospace Charter, issued their second gender pay report and launched Springboard training for women in non-senior roles. Future plans include creating an inclusive hiring toolkit, supporting employee networks and working with other businesses and government to effect industry change (Virgin Atlantic, 2018). Although aviation and aerospace companies strive to become more inclusive, close the gender pay gap and create a culture of diversity, there are very few female focused mentoring programmes within the key corporations. CEO sponsorship is needed to show commitment to inclusivity and diversity from the top. But corporate commitments are not enough to make the difference, practical and proactive programmes, such as alta, are needed to push the gender equality narrative forwards before a significant shift can be made.

The alta Mentoring Scheme

The alta mentoring scheme operates through an on-line platform, specifically for the aviation and aerospace industry, as part of the Royal Aeronautical Society's (RAeS) careers support for women in the industry. alta is the outcome of a joint knowledge-exchange project between academics and industry and was designed to meet the mentoring needs of women in

this male dominated industry, who otherwise had no, or very little, mentoring support. The aim of alta was to create an on-line mentoring platform based upon the needs of women, that were identified as being important and that would address female under-representation and the lack of support for career progression.

The alta scheme has created a win-win opportunity for aviation employers and employees alike. Employers offering the alta scheme as part of their employee benefits may become an employer of choice for women who acknowledge that progression within the aviation industry is difficult, particularly in a technical role.

By encouraging female employees to network with other women in the industry they gain valuable insights into establishing their careers within a male dominated work environment as well as being exposed to good practice in other organisations. In this way the women benefit from a support network that functions online, with flexible times and methods of communication between mentor and mentee, backed up with in person activities as a wider group which helps build a meaningful industry network.

The employer has the benefit of loyalty, enhanced learning and expanded networks for their female employees, beneficial professional networks can enhance the knowledge base within the organization as a whole. Working to change the working culture benefits everyone.

Quality women are retained in the business as an understanding of female retention matures and the knowledge of support networks filters through HR policies and practices of the organization.

Methods

This chapter is based upon a wider knowledge-exchange project underpinned by six months of research across the aviation and aerospace industry (a survey, interviews and focus groups with professional women and employers) to ascertain both the need for the mentoring scheme

and to determine what women wanted from it. The project received ethics clearance from the University of the West of England.

Here we draw on four focus groups held with a total of 21 women across the aviation and aerospace industry. They represented both technical and middle/senior managerial roles, as well as private and third sector, large and small organisations. Six were aged 35 or younger; six were aged between 36 and 45 and eight were aged 46 or older. Twelve participants had no children. Most (17) worked full-time and 12 had postgraduate qualifications. All were either White British or White other.

Figure 1 here

Focus groups lasted approximately one hour. They aimed to elicit women's experiences of mentoring and their perceived and experienced benefits and barriers to mentoring, as well as to find out specifically what women wanted from the alta mentoring platform and their views on its women-only nature.

The focus groups followed the principles of participatory workshops (Chambers, 2002). Accordingly, the researchers acted as facilitators to enable spontaneous issues to be raised by the participants (Hennink, 2007, p.5), the facilitators leaving the room at times to encourage free discussion and brainstorming.

The qualitative data generated was analysed following a thematic approach (Clarke & Braun, 2013). Two of the authors coded the data independently, analysing pre-agreed sections of focus group transcripts. Significant themes were identified and analysed, and patterns across the data set were sought.

Findings

Alta was developed as a relational mentoring tool to connect women across the aviation and aerospace industry. It is an opportunity for women to gain advice and guidance from more experienced women but also for women to raise their profiles as mentors. Importantly, it is a means for mentors and mentees to learn and grow together, through interdependency, in the context of a male dominated industry where women often feel isolated and unwelcome and struggle to find the mentoring they need (Durbin & Lopes, 2017; Durbin, Lopes & Warren, 2020). Alongside being a mentoring platform, alta also has a community focus, where women can come together, through regular networking and events, in a safe space that is built upon trust and confidentiality.

The development of alta depended very much upon asking the women in the industry what they wanted from an industry wide mentoring scheme. This included ascertaining what they saw as the benefits and barriers to mentoring and what they would like to see from alta. In our relational approach, we asked those who had been/were mentors about their experiences, as well as those who had been/were mentees. The problem for most women was that there was no formal way of finding a mentor and their experiences of mentoring reported below were based mostly upon ad hoc and informal mentoring. For many, there was a complete lack of mentoring available. There were no existing formal mentoring schemes for women and any schemes that were in existence were not open to our participants. Notwithstanding this, the information we were able to gather regarding their mentoring experiences enabled us to identify what was and what was not working for these women.

The Benefits and Barriers of mentoring: the mentor's perspective

For those who had experience of mentoring others, many felt that the mentoring relationship added value for the organization and for them personally as mentors, in terms of gaining or increasing in confidence, competence and capability. In the focus group discussions, the benefits of mentoring identified by those who had been or were currently mentors, ranged

from personal reward through to altruism, with general agreement that mentoring positively contributed to sustainable businesses. As one mentor commented:

All the girls I know in the industry are damned good and I want them, and I want more of them, and I want the good ones that we find to stay so that actually it makes my life a lot easier. So, it is about helping others, obviously, but it's also helping yourself. [FG1]

Other benefits of being a mentor included the feeling 'that you have something useful to contribute', especially for the 'older generation' who still had a lot to give in terms of their technical expertise. Being 'a challenging mentor', a mentor with whom mentees could talk to openly and honestly and encouraging mentees to think differently, were also identified as a benefit from the mentor perspective. Sharing knowledge with mentees was also important.

Participants agreed that mentoring, when done well, was invaluable, particularly for younger women early in their careers. Crucial to this was the need to build a relationship which offered advice from a different perspective, from which mentors could provide a source of support, motivation, and focus relating to current situations and future career paths.

I found that motivation to me is the key of mentoring. Keeping someone focused and supporting them morally to just never give up and things like that. [FG1]

It was considered beneficial for the mentee to receive guidance based on a mentor's personal and professional experience, described by one participant as being "an informed sounding board" [FG1].

I think the key thing is, it's not managing, it's not telling people what to do, it's almost using your own life experience to explain to others their options. So it's not directed, like – you must do this, you should do this – it's a bit like – I did this, or you might consider doing this – but it needs knowledge of the business in this case. [FG1]

Confidentiality from both sides was considered vital to foster trust and to be able to have frank conversations which in some cases could have potentially career limiting consequences:

... I think sometimes you have to be able to offer advice or experience to say – now is not a good time....and it's absolutely not the right thing to say on behalf of the company or politically, or whatever, but just with your knowledge of what's going on, it really might not be a good time. But you need to be able to say that sort of thing and not just toe the party line. [FG2]

These mentors clearly had a focus upon relational mentoring (Ragins, 2012): they saw their role as a mentor as adding value, building relationships and helping themselves as well as their mentees. This was promising, given they were potential future alta mentors who could encourage and motivate alta mentees in a supportive rather than protective/dominant way. However, the limited number of senior women in the industry meant that there were less opportunities to find a female mentor in the first place, and because of their scarcity, the 'good' ones may not have the capacity to take on further mentoring commitments. Some senior women felt overwhelmed with requests. One participant described having been recommended as a mentor by her CEO and was then faced with several requests for meetings

with junior colleagues:

... so I now have in my to do list at least six young women wanting to have serious heart-to-heart conversations with me. ...[I]n actual fact when you speak to them, they actually want much more than help and advice and whatever and it's actually quite a commitment... [FG1]

She went on to say that despite her commitment to supporting colleagues, she was not always the right person for every mentoring relationship, suggesting that it would be more constructive to identify appropriate matches:

I think a lot of what we can do on the mentoring can actually be getting the right people to talk to each other and start helping them to grow their network. [FG1]

On the other hand, there was a feeling of frustration from some who had volunteered to be a mentor and felt they had a lot to offer, but they had heard nothing since, or that there were multiple, uncoordinated mentoring schemes within the organisation:

Over the last 20-something years, I have signed umpteen forms and emails saying I am a Chartered Engineer, I'm happy to be a mentor, I'm happy to be a mentor socially, in whichever category, and about every two years, I fill in that "Yes, I'm happy to be a mentor...and nothing happens. And then it's like "Well, I put my name on the list last time!" "What list?" "Well, the list that that person created." "Well, what's that list?" "I don't know."[FG3]

The alta mentoring scheme was designed to tackle the problem of a lack of female mentors by bringing together, in one place, experienced women from different organisations in the industry. It also offers the opportunity to women who want to be mentors but have perhaps been overlooked for this role in their organisations.

The Benefits and Barriers of Mentoring: the mentee's perspective

There were less benefits identified by mentees as most had not been able to access mentors. For those who had achieved this, on an informal basis, there were some benefits identified. For a mentoring relationship to be successful, participants felt there had to be mutual respect and trust between the mentor and mentee, where both had the opportunity to openly discuss potentially uncomfortable issues, in line with the principles of relational mentoring (Ragins, 2102, 2016). This also required a position of neutrality, which is more difficult to achieve when managers assume a mentoring role, or mentors are appointed within an organisation:

You won't have an effective mentor/mentee relationship unless there is mutual respect there. ... you have to respect that person's opinion in that area and you have to know that they also respect what you're asking enough for you to be open with them.

[FG1]

Tapping into networks, contacts and information through mentors was identified as important, especially for promotion opportunities:

You get to a certain point in your career where jobs stop being advertised. You don't see a position that you then apply for and go for an interview so much. The next opportunity's the next job to come from being invited to attend the interview and that only happens if you network. And mentors can be quite instrumental in that. I'm not sure it's right but it happens like that....[FG2]

Having the benefit of the mentor's experience, who could also help to create opportunities, was mentioned by several participants. The mentor was perceived as being more experienced and someone who will have faced challenges that the mentee may one day face herself. This is related to the mentor having more of a 'helicopter view':

So I think a mentor in one sense does have to have some answers but it's more about having a wide view and being able to see the big picture and the much bigger picture: "I'm new into here so I need some guidance on the sort of wider pictures." So almost a helicopter view and point in perhaps a different direction, the one you hadn't noticed...you want the mentor to have the big picture view. [FG3]

It was also acknowledged that different mentors can be helpful at different times and as the mentee became more experienced, it was important for them to move on to other mentors.

Sense checking and being put on the right track by mentors was also a benefit for many.

Barriers to mentoring

However, a number of barriers to mentoring were also identified. A lack of accessibility to mentors was a barrier for many. One participant said this may be due to mentors not having the time to take on mentees because their priority was the business itself. A lack of confidence to approach mentors was also a barrier, alongside difficulties in identifying potential mentors.

A mismatch between mentors and mentees was also raised by participants, often due to mentors just being assigned by line managers, with no choice on the part of the mentee:

I was assigned a mentor when I joined my last group. And I was assigned her because she was a girl and in my sister department. And she was female. She just wasn't interested. So to be assigned a mentor that really isn't interested in being a mentor is pointless. [FG3]

I think it's very hard to find two people and link them together. [FG3]

Trust was also an issue for some in relation to confidentiality and feeling that if they gave mentors certain information, this could be 'held against them' in the future. One participant felt that not having a mentor meant that you did not have to keep your plans secret or 'watch what you say'.

You need to be able to trust the person, 'cause you're telling them where you wanna be in 5 years and maybe that doesn't sit with the department well, or it doesn't fit the business needs but it's where you want to be, so you need to be able to kind of trust someone within the business to share that with them. Or maybe outside the business. So that's probably a big barrier, for myself anyway [FG4]

Unreliable mentors were also identified as a problem, as highlighted by Eby e al. (2010). Some had seen their mentors once and then never saw them again. Some also felt that there were mentors who had not really considered the needs of their mentees:

I remember him giving me some guidance and I just thought to myself "No way". [Laughs.] "I'm not going to do this because it's what he wants. It's what he would have done but he didn't try to figure out what is good for me. What could *I* do. So you should, you... I could, you should. No. Help me find my own goal, my own ideas...[FG4]

Another barrier was having a mentor who was in the same department and/or their line manager. The view was that line managers would be more interested in the mentee 'getting the work done' and not wanting the mentee to grow out a role that was useful to the line manager which some felt would hinder them from moving around the organization. For some, there was a blurring of boundaries between the roles of mentor and manager; one described her management responsibilities included the role as mentor to her staff. However, this raises several questions regarding the independence of the relationship: where do you go for advice if you are not comfortable approaching your line manager? This emphasises the important role of an independent mentor, able to give non-judgmental and non-threatening advice and guidance.

How does alta help to address these barriers?

The underpinning research for the design of alta enabled us to design a mentoring scheme that would be useful and accessible to women. Both the positive and negative experiences of the women participants were taken into account, especially the barriers but also the preference towards relational mentoring. This industry-wide mentoring scheme opened up access to mentors for the first time and enabled the mentors themselves to step forward to work with women looking for mentoring support. Mentees are able to identify potential mentors through the on-line platform, through the use of specifically designed matching questions and algorithms that identify the best match between mentee and mentor. The

platform enables women to receive mentoring remotely (e.g. while based in another country, on deployment or on maternity leave), eliminating geographical barriers to mentoring (Eby & Lockwood, 2005). Alta mentors are volunteers who are professional women in the industry who give their time to support alta in meeting its objectives. They are therefore more likely to not see mentoring as a burden (Parise & Foret, 2008). The mis-matching of mentors and mentees, a problem often pointed to in the literature (e.g. Long, 1997), is therefore minimized. Importantly, mentees will not be matched with line managers or colleagues within their own organisations.

Finally, the focus group participants were asked to list three features that they would like to see from the mentoring scheme, from the perspectives of both mentor and mentee. The responses were recorded as a 'wish list', illustrated below as a word cloud. Top features were empowerment, inspiration and being challenged. Also important were a successful match between mentor and mentee and the opportunity to develop personal relationships.

Figure 2 here: WORD CLOUD

As one participant summed it up:

I think for me, it's very simple. It's just a woman that, you know, has a bit of experience and knowledge, who can guide me and support and who has time for me [FG4]

Conclusions

Occupational gender segregation is an endemic problem in the UK and globally. While horizontal gender segregation pushes men and women into different occupations and industries, vertical gender segregation pushes the majority of women into the lower paid, less senior roles. This is damaging to women's careers and makes it difficult for women to break into what are traditionally male dominated industries (such as aviation and aerospace). For the few who do break through, there are often inequalities to contend with (e.g., lack of promotion, earning less than male colleagues) and a lack of support, such as mentoring (Singh et al., 2009b). The industry is a long way from the achievement of gender equality, despite a plethora of initiatives by a number of companies to promote and support women.

Alta is the first industry wide mentoring scheme to be launched in the aviation and aerospace industry. It is there to offer mentoring support to women who are severely under-represented in the industry and as a formal scheme, it is inclusive for all women. Alta is supported by several large organisations within the industry and at the time of writing, had 460 women signed up as mentors and mentees, with more than 100 since the start of the Covid-19 pandemic. While alta operates through the RAeS, it is supported by a Steering Committee, comprising the founding partners, who oversee the strategic direction and day-to-day running of alta, including networking events.

Our research indicated a clear need for alta within this industry. While there were examples of the benefits of mentoring, especially from the mentor's perspectives, there were a number of barriers identified. These included, from the mentor perspective, a shortage of women mentors and women putting themselves forward as mentors but not being taken up on their offers. From the mentee perspective, there was a lack of access to mentors, difficulties in identifying mentors and a lack of confidence to approach potential mentors. Both mentors and mentees were experiencing similar problems with no clear way to bring these two groups together. The solution was with alta – a mentoring platform that could bring women together in a non-threatening, confidential and safe environment,

where women could approach other women for mentoring support and build relationships across the industry. Bringing women together through alta also helps to start to build a critical mass of women who would otherwise be dispersed.

The ethos of relational mentoring is central to alta in a number of ways. Firstly, alta brings together women who have an interest in supporting one another, many signing up to alta as both mentors and mentees, denoting the 'two-way street' of mentoring (Ragins, 2016). It was based upon a simple plan; ask already successful women to reach out and support less experienced women towards their own version of success. Later on in their career, those women who have been helped will be encouraged and mentored to be mentors themselves, completing a circle of positive benefit for both the individual women and the companies they work for. Secondly. Personal growth is central to alta mentoring, through building connections between women in the industry, ultimately empowering women to help one another and tackle the challenges of working in a male dominated industry (Jordan & Hartling, 2002). The central tenet upon which alta was designed – to ask women in the industry to identify what they wanted from an industry-wide mentoring scheme – was the ultimate way to empower these women. Thirdly, the confidential nature of alta (through a secure platform) means that it provides a 'safe space' for women (Ragins, 2016) where trust can be built between the mentor and mentee. Fourthly, through the resources offered via the alta platform (mentor/mentee training, a handbook and guidance on building mentoring relationship) alta strives to create the conditions for relational mentoring to develop. This is enhanced through alta becoming a focal point for women in the industry, as alta became a network and mentoring community. Networking events are held regularly, to bring members together to share experiences.

Through detailed research and industry knowledge we have come to understand that the lack of role models and support systems can leave women feeling isolated and disillusioned. Mentoring, in its many forms, can fill this gap, by creating positive support networks, facilitating access to senior women across the industry and creating real life examples of how to navigate a male dominated industry. As women make their way into senior roles the importance of reaching back to support female colleagues while maintaining a focus on changing the culture of the workplace is essential. In the end, it is all down to us to support one another and build an ethos of relational mentoring.

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References:

- Allen, T. D., Poteet, M. L., and Burroughs, S. M. (1997). The mentor's perspective: A qualitative inquiry and future research agenda. *Journal of Vocational Behavior*, 51(1), 70–89.
- Allen, T.D., Lentz, E. and Day, R. (2006). Career success outcomes associated with mentoring others: a comparison of mentors and nonmentors. *Journal of Career Development*, 32 (3), 272-285.

- Baranik, L., Roling, E. A., and Eby, L. T. (2010). Why Does Mentoring Work? The Role of Perceived Organizational Support. *Journal of Vocational Behavior*, 76(3), 366–373.
- Beyene, T., Anglin, M., Sanchez, W. and Ballou, M. (2002). Mentoring and Relational Mutuality: Proteges' Perspectives. *Journal of Humanistic Counseling, Education and Development*, 41(1), 87–102.
- Blake-Beard, S.D. (2001). Taking a hard look at formal mentoring programs. *The Journal of Management Development*, 20(4), 331–345.
- Clarke, V. and Braun, V. (2013). Successful qualitative research: A practical guide for beginners. London: Sage.
- Chambers, R. (2002). *Participatory workshops : A sourcebook of 21 sets of ideas and activities*. London: Earthscan Publications.
- Curran, W., Hamilton, T., Mansfield, B., Mountz, A., Walton-Roberts, M., Werner, M. and Whitson, R. (2019). 'Will you be my mentor?' Feminist mentoring at mid-career for institutional change. *Gender, Place & Culture*, 26(12), 1721–1739.
- Dashper, K. (2018). Confident, focused and connected: The importance of mentoring for women's career development in the events industry. *Journal of Policy Research in Tourism, Leisure and Events*, 10(2), 134-150.
- Department for Transport (2018). Aviation 2050: The Future of UK Aviation. Department for Transport Green Paper for Consultation. London: Department for Transport.
- Dreher, G.F. and Cox, T.H. (1996). Race, gender and opportunity: a study of compensation attainment and the establishment of mentoring relationships. *Journal of Applied Psychology*, 81 (3), 297-308.

- Durbin, S., Lopes, A., Warren, S. (2020). Challenging male dominance through the substantive representation of women: the case of an online women's mentoring platform. *New Technology, Work and Employment*, 35(2), 215-231.
- Durbin, S. and Lopes, A. (2017). 'Will the Head of Engineering Please Stand Up? The underrepresentation of women in engineering'. In K. Broadbent, G. Healy and G. Strachan (eds.) *Gender and the Professions*. London: Routledge
- Durbin, S. (2015). Women who Succeed: Strangers in Paradise? Basingstoke: Palgrave Macmillan.
- Durbin, S. and Tomlinson, J. (2014). Female Part-time Managers: careers, mentors and role models. *Gender, Work and Organization*, 21(4), 308-20.
- Durbin, S. (2011). Creating knowledge through networks: a gender perspective. *Gender, Work and Organization*, 18(1), 90-112.
- Eby, L. T., and Lockwood, A. (2005). Proteges' and mentors' reactions to participating in formal mentoring programs: A qualitative investigation. *Journal of Vocational Behavior*, 67(3), 441–458.
- Eby, L.T., Butts, M.M., Durley, J.R., and Ragins, B.R. (2010). Are bad experiences stronger than good ones in mentoring relationships? Evidence from the protégé and mentor perspective. *Journal of Vocational Behavior*, 77(1), 81-92.
- Ehrich, L. (2008). Mentoring and Women Managers: another look at the field. *Gender in Management: An International Journal*, 23(7), 469-483.
- Fletcher, J., and Ragins, B. R. (2007). Stone center relational cultural theory: A window on relational mentoring. In Ragins, B.R., and Kram, K.E. (eds.) *The handbook of mentoring at work: Theory, research, and practice*. Thousand Oaks, CA: Sage.

- Fowler, J.L., Gudmundsson, A.J., and O'Gorman, J.G. (2007). The relationship between mentee mentor gender combination and the provision of distinct mentoring functions. *Women in Management Review*, 22(8), 666-681.
- Fullick-Jagiela, J.M., Verbos, A.K. and Wiese, C.W. (2015). Relational Mentoring Episodes as a Catalyst for Empowering Protégés: A Conceptual Model. *Human Resource Development Review*, 14(4), 486–508.
- Gammel, J.A. and Rutstein-Riley, A. (2016). A Relational Approach to Mentoring Women Doctoral Students. *New Directions for Teaching and Learning*, 147, 27-35.
- Graham, C. (2019). Literature review: the gap between mentoring theory and practice for diverse women faculty. *Mentoring & Tutoring: Partnership in Learning*, 27(2), 131-143.
- Grant, C., and Ghee, S. (2015). Mentoring 101: Advancing African-American women faculty and doctoral student success in predominantly White institutions. *International Journal of Qualitative Studies in Education*, 28(7), 759–785.
- Hansford, B.C., Ehrich, L. C. and Tennent, L. (2004). Formal Mentoring Programs in Education and other Professions: A Review of the Literature. *Educational Administration Quarterly*, 40(4), 518-540.
- Hennink, M. (2007). *International focus group research: A handbook for the Health and Social Sciences*. Cambridge: Cambridge University Press.
- Hersby, M.D., Ryan, M. and Jetten, J. (2009). Getting together to get ahead: The impact of social structure on women's networking. *British Journal of Management*, 20(4), 415–30.
- International Civil Aviation Organisation (2019). Aviation Benefits Report 2019.

- RUNNING HEADER: [Relational Mentoring in the Aviation and Aerospace Industry

 https://www.icao.int/sustainability/Documents/AVIATION-BENEFITS-2019web.pdf
- Johns, R. and McNamara, J. (2014). Career development in higher education through group mentoring: A case study of desirable attributes and perceptions of a current programme. *Australian Journal of Career Development*, 23 (2), 79–87.
- Jordan, J.V. and Hartling, L.M. (2002). New Developments in Relational Cultural Theory. In M. Ballou and L.S. Brown (eds.) *Rethinking Mental Health and Disorders: feminist perspectives*. New York: Guilford Publications.
- Institute of Leadership and Management (2011). Ambition and gender at work.

 https://www.ilm.com/~/media/ILM%20Website/Downloads/Insight/Reports_from_ILM_website/I
 LM_Ambition_and_Gender_report_0211%20pdf.ashx
- Kao, K.Y., Rogers, A., Spitzmueller, C., Lin, M.T. and Lin, C.H. (2014). Who should serve as my mentor? The effects of a mentor's gender and supervisory status on resilience in mentoring relationships. *Journal of Vocational Behavior*, 85(2), 191–203.
- Kim, S.S., Im, J. and Hwang, J. (2015). The effects of mentoring on role stress, job attitude, and turnover intention in the hotel industry. *International Journal of Hospitality Management*, 48, 68–82.
- Korn Ferry (2019). Soaring Through the Glass Ceiling: taking the global aviation and aerospace industry to new heights through diversity and inclusion. London: Korn Ferry.
- Kammeyer-Mueller, J.D. and Judge, T.M. (2008). A quantitative review of mentoring research: Test of a model. *Journal of Vocational Behavior*, 72(3), 269–283
- Laverick, D.M. (2016). *Mentoring processes in Higher Education*. Indiana: Springer.

- Leck, J., Elliott, C. and Rockwell, B. (2012). E-Mentoring Women: Lessons Learned From A Pilot Program. *Journal of Diversity Management*, 7(2), 83–96.
- Lineham, M. and Walsh, J. (1999). Mentoring Relationships and the Female Managerial Career. *Career Development International*, 4(7), 348-352.
- Long, J. (1997). The dark side of mentoring. Australian Educational Research, 24, 115–123
- McGuire, G.M., and Reger, J. (2003). Feminist Co-Mentoring: A Model for Academic Professional Development. *Feminist Formations*, 15(1), 54–72.
- Mezias, J.M. and Scandura, T.A. (2005). A needs-driven approach to expatriate adjustment and career development: a multiple mentoring perspective. *Journal of International Business Studies*, 36(5), 519–538.
- Meyerson, D.E. and Fletcher, J.K. (2000). A Modest Manifesto for Shattering the Glass Ceiling. *Harvard Business Review*, 78(1), 126–136.
- Miller, J.B. (1976). Towards a New Psychology of Women. Boston, MA: Beacon Press.
- Okurame, D.E. (2007). Perceived mentoring functions: does mentor's gender matter? *Women in Management Review*, 22(5), 418-427.
- Parise, M. R. and Forret, M. L. (2008). Formal mentoring programs: The relationship of program design and support to mentors' perceptions of benefits and costs. *Journal of Vocational Behavior*, 72(2), 225–240.
- Phillips, S.L., Dennison, S.T. and Davenport, M.A. (2016). High Retention of Minority and International Faculty Through a Formal Mentoring Program. *To Improve the Academy*, 35(1),153–179.

- Ragins, B.R. (2012). Relational Mentoring: A Positive Approach to Mentoring at Work. In Cameron, K. and Spreitzer, G. (eds.) *The Oxford Handbook of Positive Organizational Scholarship*. Oxford: Oxford University Press, 519–536.
- Ragins, B.R. (2016). From the ordinary to the extraordinary: High-quality mentoring relationships at work. *Organizational Dynamics*, 45, 228–244.
- Ragins, B.R. and Scandura, T.A. (1999). Burden or blessing? Expected costs and benefits of being a mentor. *Journal of Organizational Behavior*, 20(4), 493–509.
- Rotondo, D.M. and Perrewé, P.L. (2000). Coping With a Career Plateau: An Empirical Examination of What Works and What Doesn't. *Journal of Applied Social Psychology*, 30(12), 2622–2646.
- Scandura, T.A. (1992). Mentorship and career mobility: an empirical investigation. *Journal* of Organizational Behavior, 13(2), 169–74.
- Scandura, T.A., and Williams, E.A. (2001). An investigation of the moderating effects of gender on the relationships between mentoring initiation and mentee perceptions of mentoring functions. *Journal of Vocational Behavior*, 59(3), 342–363.
- Seligson, D. (2019). Women and aviation: Quality jobs, attraction and retention. *ILO Working Paper 331*. Geneva: International Labor Organization.

 https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_740235.pdf
- Singh, V., Bains, D. and Vinnicombe, S. (2002). Informal Mentoring as an Organisational Resource. *Long Range Planning*, 35(1), 389–405.

- Singh, V., Ragins, B.R., Tharenou, P. (2009). What matters most? The relative role of mentoring and career capital in career success. *Journal of Vocational Behavior*, 75(1), 56–67.
- Singh, R., Ragins, B.R. and Tharenou, P., (2009b). Who gets a mentor? A longitudinal assessment of the rising star hypothesis. *Journal of Vocational Behavior*, 74(1), 11–17.
- Swap, W., Leonard, D., Shields, M. and Abrams, L. (2001). Using Mentoring and Storytelling to Transfer Knowledge in the Workplace. *Journal of Management Information Systems*, 18(1), 95–114.
- Tharenou, P. (2005). Does mentor support increase women's career advancement more than men's? The differential effects of career and psychological support. *Australian Journal of Management*, 30(1), 77–109.
- Turner, C., Gonzalez, J., and Wood, J. (2008). Faculty of color in academe: What 20 years of literature tell us. *Journal of Diversity in Higher Education*, 1(3), 139–168.
- Underhill, C. (2006). The effectiveness of mentoring programs in corporate settings: A metaanalytical review of the literature. *Journal of Vocational Behavior*, 68(2), 292–307.
- Van Vianen, A., Rosenauer, D., Homan, A.C., Horstmeier, C. and Voelpel, S.C. (2018).

 Career mentoring in context: A multilevel study on differentiated career mentoring and career mentoring climate. *Human Resource Management*, 57(2), 583–599.
- Vinnicombe, S. and Singh, V. (2002). Sex Role Stereotyping and Requisites of Successful Top Managers. *Women in Management Review*, 17(3/4), 120–130.
- Virgin Atlantic (2018). Annual Report, 2018. Crawley: Virgin Atlantic.

- https://flywith.virginatlantic.com/content/dam/corporate/VIR007_2018%20Annual%2 0Report%20%26%20Accounts.pdf
- Vinnicombe, S. and Singh, V. (2003). Locks and Keys to the Boardroom. *Women in Management Review*, 18(6), 325–333.
- Wang, Y., Hu, C., Hurst, C.S., and Yang, C. (2014). Antecedents and outcomes of career plateaus: The roles of mentoring others and proactive personality. *Journal of Vocational Behavior*, 85(3), 319–328.
- Waxman, H., Collins, T., and Slough, S. (2009). Lessons learned about mentoring junior faculty in higher education. *Academic Leadership*, 7(2), 18–22.
- WISE Women In Science and Engineering (2018). Statistics on Women in Engineering.

 Available at: https://www.wisecampaign.org.uk/statistics/2018-workforce-statistics/
- Zambrana, R., Ray, R., Espino, M., Castro, C., Cohen, B., and Eliason, J. (2015). "Don't leave us behind": The importance of mentoring for underrepresented minority faculty.

 *American Educational Research Journal, 52(1), 40–72.

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