

# **Is Ability-Job Fit Important for Work Engagement? Evidence from the Irish Civil Service.**

## **Introduction**

Studies of work engagement - ‘a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption’ (Schaufeli et al. 2002, 74) - were, until recently, mainly confined to the private sector with scant attention paid to the public domain. However, interest in public sector work engagement is increasing and findings suggest that this topic is an important addition to the public administration research agenda (Ancarani et al. 2020; Borst et al. 2020; Borst, Kruyen, and Lako 2019; Boyd and Nowell, 2020; Peretz 2020). To date, there has been only limited attention to the relevance of context in understanding work engagement (Bakker, Albrecht and Leiter 2011; Fletcher et al. 2020; Jenkins and Delbridge 2013). Consideration has certainly been given to the differences found between the public and private sectors (Borst et al. 2020), but Fletcher et al.’s (2020) review notes that more than three quarters of the studies of work engagement within the public sector consider particular professions or occupations (e.g. healthcare, education), with less than 10 percent of studies situated among government employees. Fletcher et al. (2020) suggest that this gives rise to a lack of precision as to whether the findings are specific to the occupation or to the particular public service/sector context.

Relatively few studies of engagement have been situated in the context of a civil service, defined as ‘the mediating institution authorized by constitutional rules which mobilizes human resources in the service of the civil affairs of the state in a given territory’ (Morgan and Perry 88, 85-86). The mobilization of these human resources is broadly achieved through the operation of either a closed (career-based) or open (position-based) system (Smalskys and Urbanovic 2017; Suzuki and Hur 2020; Suzuki and Hur 2021). In closed systems individuals are generally recruited to entry grades (e.g., clerical officer) based on examination success and

they are then allocated to specific jobs as vacancies arise; promotion competitions allocate individuals in a similar way. Remuneration systems are based on standard grades and payment is based on seniority. In contrast, open systems are focused on selecting the best candidate for each position and are therefore characterised by greater flexibility in recruitment and promotion with high levels of mobility between the public and private sectors. Civil service reforms have altered the composition of these systems so that these no longer exist in their pure form; rather systems are categorized as relatively open or relatively closed depending on the extent to which they display characteristics of either type (Smalskys and Urbanovic 2017).

In closed systems, people are recruited and promoted to grades, rather than jobs, so limited attention is paid to the fit between individuals' abilities and those required in the job. Yet, consideration of ability-job fit is important if the problem of 'square pegs in round holes' (Karl and Peat 2004) is to be avoided. In addition, the poor use of abilities may stifle career development options, an important factor in public service motivation (PSM) and work engagement (Peretz, 2020). Questions remain about whether closed systems have positive or negative implications for how individuals experience their work, as evidenced by levels of work engagement and meaningful work: are individuals able to fulfil their selves in work when there may be a mismatch between the jobs they are doing and the abilities they possess? This question is particularly important given current interest in civil servants' competencies (Kruyen and Van Genugten 2020) and the broader issue of talent management in the public sector (Kravariti and Johnston 2019).

This paper uses job-fit theory (Edwards 1991; Lauver and Kristof-Brown 2001) to explore these issues in the context of the Irish civil service, where a relatively closed system operates (OECD 2009). Using data from a national survey, we explore the extent to which ability-job fit – how individuals' perceptions of their abilities fit with the skill and competency demands of their jobs (Abdel-Halem, 1981) – is linked to levels of work engagement. We

deepen this understanding by considering whether the relationship between ability-job fit and work engagement is mediated by perceptions of meaningful work. We also examine whether the relationship between ability-job fit and meaningful work is strengthened when there are opportunities for prosocial impact – the notion of making a positive difference in the lives of others through one’s work - a concept that is of particular relevance for those working in the public service (Grant 2008a).

Our study makes several contributions to knowledge. At a theoretical level, by focusing on job-fit theory, we complement the job demands-resources (JD-R) model that has dominated the engagement landscape (Bailey et al. 2017; Bakker 2015) but where its application in a public sector context ‘is not straightforward’ (Fletcher et al. 2020, 19). We adopt a holistic or *molar* perspective (Edwards et al. 2006), which considers how individuals perceive the fit or *match* between their abilities with the demands in their jobs. Person-job fit theory has rarely been used in explicating engagement and yet it focuses on job content, which is identified as an important factor in motivating public sector employees (Buelens and Van den Broek 2007).

Second, our study highlights meaning – ‘the value of a work goal or purpose, judged in relation to an individual’s own ideals or standards’ (Spreitzer 1995, 1443) – as an important mechanism that mediates the relationship between ability-job fit and work engagement. To date, there has been very little empirical work that examines how individual-level factors, such as personality traits, work values or abilities, link to meaningful work (Lysova et al. 2019). In responding to the call to adopt a work-role fit lens to meaningful work (Hansen 2013), we contribute to the stream of research that has integrated psychological mechanisms into public administration theory (e.g. Borst et al. 2019; Boyd and Nowell, 2020; Mostafa and El-Motalib 2020; Zeng, Wu and Graham 2020). Third, in exploring the moderating role of prosocial impact on ability-job fit we highlight the complexity of prosocial impact as a relational mechanism (Perry 2021) and provide insights into the unanswered question of how a balance might be

achieved between the needs of the self – or multiple selves – and those of others in the realization of meaningful work (Bailey et al. 2019). Finally, in exploring the ramifications of job-ability fit for civil servants in a relatively closed HR system, we identify specific factors that influence their work engagement as well as providing insights into the ways in which engagement is experienced and how it might be managed in a civil service context. This contextualized understanding of how engagement unfolds in specific public sector research settings has been largely neglected in the literature to date (Fletcher et al. 2020).

## **Theoretical Background**

### ***Ability-job fit and work engagement***

From the perspective of positive psychology, work engagement is perceived as a concept that captures how employees experience their work and encompasses facets such as energy, mental resilience and persistence; involvement, commitment and enthusiasm; and being fully immersed and absorbed in work (Schaufeli et al. 2002). Engagement has been found to be positively related to performance (Borst et al. 2020; Christian et al. 2011) and negatively related to burnout (Schaufeli and Bakker 2004).

A good deal of research on work engagement has relied on the JD-R model (Bailey et al. 2017; Bakker 2015), positioning engagement as the culmination of a motivational process where certain job resources can buffer the effects of certain job demands on engagement. Despite its influence, there are still unresolved issues regarding this model. For example, there are conflicting findings (Crawford et al. 2010) regarding the extent to which job demands might be perceived as either challenges (e.g. stretch goals) or hindrances (e.g. red tape). One theoretical framework that has rarely been utilized to explicate work engagement is person-job fit theory, even though it has been suggested that for workers in larger organizations with more formal hierarchies, fit with the job may be more important than other types of fit (Christensen

and Wright 2011; Prysmakova 2021). The ability-job fit literature considers that high levels of ability to deal with the complexities of work, including work demands or expectations (Abdel-Salem 1981; Burnette and Pollack 2013; Schuler 1980; Xie and Johns 1995), will be associated with positive outcomes such as job satisfaction. It further suggests that individuals with high levels of ability will regard the demanding aspects of their work as challenges rather than constraints (Schuler 1980). This represents a molar perspective, where both abilities and demands are assessed holistically rather than independently (Edwards et al. 2006). Thus, and consistent with Lewin's field theory, 'instead of picking out one or another isolated elements within a situation' (Lewin 1942, 63), demands and abilities 'have to be considered as one constellation of interdependent factors' (Lewin 1946, 338).

A variety of positive outcomes such as job satisfaction, motivation, performance, retention and low stress have been linked to person-job fit (Edwards 1991; Lauver and Kristof-Brown 2001). Studies have reported positive relationships between person-job fit and work engagement among mission workers (Manson and Carr 2011) and student interns (Saks and Gruman 2011). Other research suggests that employees reporting a high match between their abilities and the demands of their job are more satisfied in their work, even in situations where there is high role conflict and ambiguity (Abdel-Halim 1981). In contrast, a misfit between demands and abilities has been associated with higher levels of stress (Hansen, 2013; Xie and Johns 1995). This suggests that individuals who perceive low ability-job fit will be more vulnerable to job demands and, in situations where demands exceed abilities, opportunities to become highly engaged in work will be lower. This is because high demands coupled with low abilities will deplete energy, enthusiasm and opportunities to become fully absorbed in work. In a similar way, individuals with high levels of abilities in jobs with low demands will most likely experience boredom (Edwards 1991; Sánchez-Cardona et al. 2020) and disengagement,

but will welcome challenges in their jobs because they have abilities to meet those challenges and as a result will be more engaged (Harju et al. 2016). We therefore hypothesize that:

*H1: There will be a positive relationship between perceived ability-job fit and work engagement.*

### ***Linking ability-job fit and engagement: The role of meaningful work***

We focus on meaning as ‘the value of a work goal or purpose, judged in relation to an individual’s own ideals or standards’ (Spreitzer 1995, 1443) and as one of four cognitions comprising psychological empowerment. Meaning, in this tradition, is a psychological state derived from the job characteristics model (JCM) and is embedded in features of job design, particularly task significance (Bailey et al. 2019). Meaning is conceptualised as a unidimensional construct that captures individuals’ perceptions of whether or not their work is worthwhile, important or valuable (Allan et al. 2019). It is also a worker-centric perspective that views meaning as ‘a subjective experience that depends on what employees *themselves* bring into work’ (De Boeck et al. 2019, 532). This involves a type of sensemaking whereby individuals help create the meanings that confirm their sense of self (Pratt and Ashforth 2003).

Meaningful work is experienced when individuals’ competencies and values are in harmony with their job (Chalofsky 2003). When employees experience fit, they are able to express their values and beliefs in their work (Kira and Balkin, 2014) and we argue that this fosters perceptions of meaningful work. Thus, the perception of ability-job fit, which arises from an interaction between the person and their job, can be viewed as core to perceptions of meaningful work (Pratt and Ashforth 2003; Tims, Derks and Bakker, 2016). While there is little empirical work linking perceptions of ability-job fit and meaningful work, some insights are available from research that has used what might be regarded as proxies for perceptions of ability (Lysova et al. 2019). For example, studies investigating self-rated job performance (Fouché, Rothmann and Van der Vyver 2017) and signature strengths (Harzer and Ruch 2012)

have reported a positive relationship with meaningful work. Research on work-role fit also suggests that there is a need for coherence between individuals' self-concept and the roles assigned at work if work is to be positively evaluated (Kristof-Brown et al. 2005; May, Gilson and Harter 2004; Schnell, Höge and Pollet 2013).

Individuals also need opportunities to utilise their abilities in order to realize their potential as such a realization has been shown to be an important predictor of meaningful work (De Boeck et al. 2019). It has also been found that when mismatches occur, such as when employees feel that their abilities are wasted in their roles, high levels of boredom will result (Sánchez-Cardona et al. 2020). Thus, employees who perceive that their jobs lack challenge and purpose will feel their actions are meaningless. If employees are given opportunities to utilize their abilities in jobs that match these abilities, there will be a sense of congruence between their self-concepts and/or the identities they hold and their jobs (i.e. person-job fit) and, as a result, their work will be more meaningful. This relationship will exist because individuals who experience perceived fit will be able to express themselves in their work (Kahn 1990). Thus, meaningful work can be realized by ensuring perceived alignment between individuals' abilities and their jobs. We therefore hypothesize that:

*H2: Perceived ability-job fit will be positively associated with meaningful work.*

### ***Meaningful work as a mediator between ability-job fit and engagement***

A recent meta-analysis of the relationship between meaningful work and a range of outcomes found that meaningful work had large correlations with work engagement, amongst other outcomes, suggesting that it may be an important facilitator of positive attitudes and affective states (Allan et al. 2019). Another meta-analysis reported that meaningful work was a mediator between several motivational job design characteristics and work outcomes (Humphrey et al. 2007). Meaningful work has further been shown to mediate the relationship between features

of the job and work engagement including: work enrichment and work-role fit (May et al. 2004), job resources (Nakamura and Otsuka 2013), and ethical leadership (Mostafa and El-Motalib 2020). This suggests that it operates as an important psychological mechanism that links the experience of work to perceptions of work engagement. In the case of ability-job fit, we propose that a high degree of ability-job fit, i.e., where there is balance between abilities and demands of the job, will influence the extent to which tasks are perceived as meaningful, which in turn will influence work engagement. For example, work engagement may be lessened if there is a lack of ability-job fit, which may lead to employees distancing themselves both mentally and physically from their work because their work lacks meaning (Kahn 1990). On the other hand, a high level of ability-job fit will be associated with a more energised and enthusiastic outlook about work, because this fit makes work more meaningful. We hypothesise that:

*H3: Meaningful work will mediate the relationship between perceived ability-job fit and work engagement.*

***Linking ability-job fit to meaningful work and engagement: The moderating role of prosocial impact***

Prosocial impact refers to ‘the experience of making a positive difference in the lives of others (e.g., co-workers, customers, or other stakeholders) through one’s work’ (Bolino and Grant 2016, 4). It is an ‘other focused psychological state’ (Grant 2008b, 35) and is one of several prosocial constructs that are of relevance in understanding motivation within the public sector (Grant 2008a). As a relational mechanism, it shifts attention from viewing public service motivation solely as a relatively stable individual-level difference (Perry and Wise 1990) to a consideration of the interpersonal interactions and relationships that comprise the social context of work. Embedded in the notion of relational mechanisms is the understanding that jobs can be designed to engender prosocial motivation (Grant 2008a).



There is now substantial research on prosocial impact including a mix of experimental and survey studies (e.g., Bellé 2014; Bellé and Cantarelli 2019; Freeney and Felenz 2013; Steijn and van der Voet 2019; Taylor 2014; Vogel and Willems 2020). These studies point to the complex nature of the construct with evidence that there is both a ‘bright’ and a ‘dark side’ (Bolino and Grant 2016). For example, Grant and Campbell (2007) investigated how perceptions that one’s work may harm others were associated with lower job satisfaction and higher burnout among public and private sector employees. They found that perceptions of prosocial impact had a buffering effect on the relationships between harming others and these outcomes. However, evidence from an experimental study suggests that public sector workers’ desire to help others may serve as a rationale for them to bend the rules (Bellé and Cantarelli 2019). A study based on a micro intervention suggests that it is not only important for individuals to be motivated to have a positive impact, and have opportunities to do so, but that they also need to be aware of the significance of their tasks in this regard (Vogel and Willems 2020). Research on the job characteristics model (JCM; Hackman and Oldham 1976) found that task significance – the extent to which an individual’s work affects the well-being of others – enhances individuals’ perception of meaning in their job. Indeed, task significance has been identified as a strong predictor of meaningful work (Allan et al. 2019).

Research suggests that relational mechanisms are important because the relationships that individuals create in and through work can strengthen perceptions of meaningful work (Freeney and Felenz 2013; Humphrey et al. 2007). Perceived prosocial impact has been viewed as a self-efficacy mechanism. From this perspective, when individuals perceive that they are making a positive difference to others’ lives they are more likely to feel that they are capable of effecting positive change and are more likely to experience greater meaning in their work (Grant 2008a; Rosso et al. 2010). Above, we argued that when individuals are in jobs that allow them to utilize their abilities, their jobs will be more meaningful to them because they

are able to be themselves at work (Kahn, 1990). Here, we argue that this effect is strengthened when individuals also perceive that they have a high level of prosocial impact in their work. This is because their work is not only personally meaningful to them but they are using their abilities to benefit others. We propose it is not just about personal fulfilment, but rather it is the execution of one's abilities in jobs that have both meaning for self and meaning for others. Therefore, prosocial impact will amplify the impact of ability-job fit on perceptions of meaningful work. We hypothesize:

*H4: The positive relationship between perceived ability-job fit and meaningful work is moderated by prosocial impact, such that the relationship is stronger when prosocial impact is higher but weakened when prosocial impact is lower.*

Figure 1 presents the conceptual model.

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## **Method**

### ***Research Context, Sample and procedure***

In common with many developed nations, the issue of public sector performance has been of ongoing concern to successive Irish governments. The pace of reform quickened following the economic crisis of 2008/9 and in 2014 a programme for the wide-ranging reform of the civil service, *The Civil Service Renewal Plan*, was launched. The extensive deliberations with staff that preceded the publication of the plan identified areas for improvement that included: the management of (under)performance, better opportunities for staff development, a requirement to match skills and roles more effectively, and the need for increased flexibility and mobility throughout the civil service. Staff were identified as the civil service's greatest resource with the attraction, development and retention of talented staff seen as critical.

Employee engagement was identified as a key priority and a decision was made to administer an engagement survey every two years. The senior management team contacted the research team for assistance with the design of the survey. Senior management wanted to ensure that the areas identified for improvement by staff were covered in the survey and the research team were able to ensure that the measures used were reliable and valid, aligned with existing theoretical frameworks, and context relevant; elements that are missing from many commissioned surveys of civil service employee engagement (OECD 2016). In the case of the findings reported in this paper, ability-job fit was chosen as a measure to assess the matching of skills and roles, while meaningful work and prosocial impact were included as important features of civil service work if talented staff were to be attracted and retained. These were factors that had been identified as important by employees in the deliberations preceding the publication of the Civil Service Renewal Plan in 2014.

The present study is based on an online survey of employees undertaken in September 2017. The survey was sent mainly via email to all 38,152 employees spanning 49 departments and agencies. Hard copies of the survey were available on request to employees without regular access to email. We took steps to maximise the response rate and therefore the representativeness of the sample. We asked a senior official from the organisation to issue the pre-notification, the invite and subsequent reminders for the survey. This is because the presence of authority in survey invitations has been associated with increased response rates and is regarded as a compliance principle that can influence an individual's decision about whether to participate in a survey (Dillman et al. 2014). We also provided an estimation of the survey completion time because survey length influences decisions about whether or not to participate (Dillman et al. 2014; Mellahi and Harris 2016).

A total of 21,365 employees participated, yielding a response rate of 56 per cent. We checked for non-response bias by exploring differences between early versus late respondents

(Armstrong and Overton 1977) and found no differences in their responses. Deletion of missing values resulted in a usable sample of 13,238 employees: 59 percent were female, 53 percent held a primary degree or higher, and the median tenure was 15-20 years. The grades were: entry level (32%), first line supervisors (25%), first line management and policy level (22%), middle management (14%), and senior management (7%). The sample profile is broadly representative of the population of the organisation which comprises: females (59%), entry level employees (33%), first line supervisors (25%), first line management and policy grades (22%), middle management (13%), and senior management (8%) (Mahon and Brassil 2020).

### ***Measures***

All measures are presented in Appendix 1.

#### *Work engagement*

A shortened 6-item version of the widely adopted Utrecht Work Engagement Scale (UWES) was used to measure work engagement (Schaufeli et al. 2006). Responses were based on a 7-point Likert scale with scores ranging from (1) never to (7) always. The Cronbach's  $\alpha$  was .90.

#### *Ability-job fit*

The extent to which employees' ability was matched by the demands of their job was measured with Abdel-Halim's (1981) 5-item scale. Responses ranged from (1) strongly disagree to (5) strongly agree. The Cronbach's  $\alpha$  for the scale was .81.

#### *Meaningful work*

Spreitzer's (1995) 3-item scale was used to measure meaningful work. Responses ranged from (1) strongly disagree to (5) strongly agree. The Cronbach's  $\alpha$  for the scale was .94.

#### *Prosocial impact*

The 3-item scale developed by Grant (2008c) was used to measure prosocial impact. Responses ranged from (1) strongly disagree to (5) strongly agree. The Cronbach's  $\alpha$  for the scale was .95.

#### *Control variables*

Consistent with prior research on work engagement (e.g. Van De Voorde et al. 2016), we controlled for gender, organizational tenure, and education. We also controlled for grade as level of seniority has been positively associated with work engagement in prior research (e.g. Robertson-Smith and Markwick 2009). These variables were coded as follows: gender (0 = male, 1 = female), tenure (years), education (second level through to master's degree and above), and grade (entry level through to senior management).

#### *Data analysis strategy*

We followed recommendations during the research design phase to address issues with common method variance (CMV; Podsakoff et al. 2003; Podsakoff, MacKenzie, and Podsakoff 2012). These steps included: testing the survey among a group of participants to ensure the wording of items was concise and precise; providing assurances about the anonymity of the survey and confidentiality of the data to reduce the tendency to respond in a socially desirable way; creating a proximal separation between the dependent variable and other variables in the survey; and utilising different response anchors which can lessen the likelihood that cognitions triggered in response to one question will not be retrieved in response to other questions. The measures employed are well-established with good evidence of their validity and reliability, which should also lessen the concern about common method bias.

A series of statistical tests was also performed to verify the integrity of the data. Hierarchical Linear Modelling (HLM) was performed to address concerns about the nested structure of the data by department and by employee grade. It was also used to determine

whether multi-level analysis techniques would be required. We estimated the proportion of total variance explained by department and employee grades by calculating the interclass correlation coefficient (ICCs) for the exogenous variables. The ICC values for work engagement and meaningful work are .03 and .02 by department, and .02 and .01 for employee grades. Overall, the proportion of variation in work engagement and meaningful work scores fall well below the .05 threshold (Heck et al. 2010) which indicates that there is no substantial clustering effect by department or grade. The results, therefore, provide evidence that the structure of the data does not substantially influence participants' responses and so does not meet the criteria for multi-level modelling. Thus, the use of individual-level variables is both justified and more parsimonious (Aguinis et al. 2013).

Confirmatory Factor Analysis (CFA) was then conducted using AMOS (v. 27) to assess model fit. A full measurement model was tested initially in which all factors were allowed to correlate. The results for a four-factor structure were as follows:  $X^2(113, 13238) = 7250.24$ ,  $p < 0.01$ ; comparative fit index (CFI) = 0.96; the Tucker Lewis Index (TLI) = 0.95; and the Root Mean Error Approximation (RMSEA) = 0.07. While the Chi-square test indicates a potential lack of fit based on the  $p$  value, this is to be expected given the large sample size (Bentler 1990; Hair et al. 2010). The model fit statistics are indicative of a good model fit as the CFI and TLI estimates are above the 0.95 threshold and the RMSEA value is within the acceptable ranges of .05 and .08 (Schumacker and Lomax 2016). The estimates for the unstandardized path coefficients for each indicator variable as it loads onto its respective latent factor are all statistically significant ( $p < .001$ ). Overall, the data provide evidence to indicate good model fit and a clear four-factor structure.

Following recommendations by Podsakoff et al. (2012), CMV was further tested for using the CFA common latent factor technique. An additional latent variable was added to the CFA analysis with a variance equal to 1. Paths were drawn from the CLF to all of the factor

items of the model and constrained to be equal. The standardized regression weights of the CFA model were then compared with the regression weights of the CFA model that contained the common latent factor (CLF). The results indicate that one of the items exceeded a difference threshold of .2 indicating that it could be affected by CMV. To check this, CMV adjusted composites were created through imputation of factor scores from the structural model that retained the common latent factor, consistent with prior research (Serrano et al. 2018).

To assess the distinctiveness of the continuous multi-item measurement constructs, sequential  $\chi^2$  difference tests were carried out by comparing the full four-factor measurement model to seven alternative nested models, as shown in Table 1. Results show that model fit of the alternative models was significantly worse compared to the full measurement model (all at  $p < .001$ ). According to the Fornell-Larcker criterion, the results of the cross-loadings also suggest that the variables in the study are distinct (Fornell and Larcker 1981).

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The heterotrait-monotrait ratio of correlations (HTMT) analysis was also performed as an additional test for the discriminant validity of the scales. Introduced by Henseler, Ringle and Sarstedt (2015), the HTMT is a new means for testing similarity between latent variables. This approach was selected as a complement to the traditional Fornell-Larcker criterion method and to address concerns of sensitivity (Rönkkö and Evermann 2013), and specificity (Voorhees et al. 2016). The HTMT test was performed using a plugin that was developed by Gaskin and Lim (2019) for AMOS (v.27) software. HTMT results are well-below the established thresholds of 0.85 for strict and 0.9 for liberal discriminant validity (Henseler et al. 2015). Table 2 presents the results.

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To test the hypotheses, structural equation modelling (SEM) was conducted using AMOS (version 27). An integrated moderated mediation model was adopted as it is particularly useful when the research question centres on why and under what conditions variables are related to one another (Hayes and Preacher, 2013). This approach also allows for contingent and indirect effects to be investigated concurrently (Edwards and Konold, 2020). Mediation tests were conducted following Hayes' (2009, 2017) approach, by directly calculating the indirect effect. The moderation test was conducted by adopting the Jöreskog and Yang's (1996) product indicator approach to Moderated SEM (MSEM), which originated from Kenny and Judd (1984) and is outlined in (Cortina et al., 2001).

## **Results**

The means, standard deviations, intercorrelations and internal reliabilities among variables were calculated using IBM SPSS (v.27), which are presented in Table 3.

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## **Model Fit and Hypotheses tests**

Aside from the high  $\chi^2$  statistic, which is to be expected given the large sample size (Hair et al. 2010), the fit statistics of the SEM model show a good model fit ( $\chi^2 = 474.52$ ;  $df = 6$ ;  $CFI = .98$ ,  $NFI = .98$ ;  $SRMR = .02$ ,  $RMSEA = .07$ ).

Hypothesis 1 posited a positive relationship between perceived ability-job fit and work engagement. The results in figure 3 show perceived ability-job fit to be positively related to



work engagement: ( $\beta = .28, p < .001$ ). Thus, Hypothesis 1 is supported. Regarding Hypothesis 2, perceived ability-job fit was shown to be positively and significantly related to meaningful work: ( $\beta = .52, p < .001$ ). Thus, the hypothesis is supported.

We followed Gunzler, Chen, Wu, and Zhang (2013) mediation SEM approach – that retains links between the IV and DV – to test Hypothesis 3. The effect of the IV (ability-job fit) on the mediator (meaningful work) was significant ( $\beta = .52, p < .001$ ) and the effects of the mediator (meaningful work) on the DV (work engagement) was significant ( $\beta = .54, p < .001$ ). Based on Hayes' (2009, 2017) approach, the indirect (mediated) effect of ability-job fit on work engagement with bootstrapping confidence intervals using 5,000 samples at 95% confidence interval was found to be .386, BCa 95% [.37, .40]. Therefore, when ability-job fit goes up by 1, work engagement goes up by 0.386. The impact of ability-job fit on work engagement remained significant ( $\beta = .28, p < .001$ ), suggesting a partial mediation of ability-job fit on work engagement via meaningful work and this reflected by the total (direct and indirect) effect of ability-job fit on work engagement of .762. (Kline, 2016). Thus, Hypothesis 3 is supported.

Finally, Hypothesis 4 posited that prosocial impact would have a moderating effect on the relationship between ability-job fit and meaningful work. The Jöreskog and Yang (1996) product indicator approach to MSEM was adopted. This involved multiplying the indicators of the latent variable that interact with each other so that all of the possible combinations of indicator products would be utilized (Algina and Moulder, 2001a,b; Steinmetz et al., 2011). The latent variable composites used were mean-centered (set to zero) because they were created through imputation based on the factor scores from the CFA model in AMOS. This is consistent with calls by Algina and Moulder (2001a,b) for the use of centered indicators (means centered to zero) to address convergence problems.

Results in Figure 2 show that the interaction term was negatively linked to meaningful work indicating a weak, negative interaction effect ( $\beta = -.05, p < .001$ ). The bootstrapping confidence intervals using 5,000 bootstrapping samples at 95% on the conditional indirect effects of the IV (ability – job fit) on the mediator (meaningful work) at low, medium and high values of the moderator (prosocial impact) were, respectively: .41, BCa 95% [.39, .43]; .39, BCa 95% [.37, .40]; .36, BCa 95% [.34, .38], all statistically significant. Index of moderated mediation was -.04, BCa 95% [-.06, -.03],  $p < .001$ . Despite a significant, albeit weak, interaction effect, the results are contrary to our hypothesis and indicate that prosocial impact in fact dampens the positive relationship between ability-job fit and meaningful work. Therefore, Hypothesis 4 was not supported. The interaction plot is presented in Figure 2.

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A summary of the findings is presented in Figure 3.

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## **Discussion**

This study set out to explore empirically whether ability-job fit is associated with higher levels of work engagement among civil servants working in a relatively closed HR system. We further investigated whether ability-job fit is associated with more meaningful work and whether meaningful work, in turn, plays a mediating role in the relationship between ability-job fit and engagement. Our findings suggest that, consistent with prior studies investigating work-role fit (May et al. 2004; Schnell et al. 2013), ability-job fit will influence engagement by enhancing opportunities to experience meaningful work. This is in line with research

suggesting that meaningful work is associated with higher levels of work engagement (Nakamura and Otsuka 2013), but it goes further by showing that meaningful work can be enhanced by high levels of ability-job fit. Furthermore, we tested whether prosocial impact had a moderating effect on the relationship between ability-job fit and meaningful work. Our findings are contrary to what we hypothesised and show that the relationship between ability-job fit and meaningful work is strengthened when individuals perceive that they have fewer opportunities to have a positive impact on the lives of others. This is in contrast to previous studies which found that prosocial impact can strengthen positive relationships (e.g. Grant and Campbell 2007) as it suggests that perceptions of high prosocial impact do not magnify the relationship between ability-job fit and meaningful work.

The findings make several contributions to knowledge. First, in adopting the theoretical lens of person-job fit, we complement the stream of public sector research that has drawn extensively on the JD-R model in order to understand work engagement (Ancarani et al. 2020; Borst, Kruyen, and Lako 2019; Borst et al. 2020; Peretz 2020). In focusing on ability-job fit, we adopted a molar perspective (Edwards et al. 2006) which enabled an exploration of the extent to which individuals perceive a match between their abilities and the skills and competencies required in the job. This matching process is particularly relevant given the relatively closed HR system that operates within the Irish civil service which generally matches individuals to *grades* rather than specific *jobs*. Our analysis points to the value of conceptualising the interaction between abilities and demands through this matching process, rather than viewing abilities and demands as distinct aspects of a job. This molar perspective avoids the pitfalls that have been associated with considering demands and resources independently in the JD-R model (Schaufeli and Taris 2014). The findings confirm the importance of the job as the relevant unit of analysis to the understanding of engagement in

public sector research (Buelens and Van den Broek 2007) and the importance of fit in understanding employee attitudes (Prysmakova 2021).

Second, the findings contribute to understanding more about the mechanisms involved in the creation of meaningful work and confirm meaning as an important psychological mechanism that can usefully be integrated into public administration research (Borst et al. 2019; Mostafa and El-Motalib 2020; Zeng et al. 2020). We found a positive relationship between perceptions of ability-job fit and meaningful work. This finding is in line with research showing that the more that individuals have opportunities in their work to achieve their potential and to realize their future work selves, the more meaningful they will find their work. In such cases, work will be congruent with their self-concept (De Boeck et al. 2019; Kahn 1990; May et al., 2004; Schnell et al. 2008). In regard to our respondents, fulfilling the needs of the self by obtaining a fit between their abilities and their job requirements fostered experiences of meaningful work and, regardless of the levels of perceived prosocial impact, this relationship was always positive. In the countless roles where prosocial impact is simply less attainable, our findings underscore the importance of ability-job fit for supporting meaningful work and, in turn, work engagement.

Third, our findings in regard to prosocial impact also add to the growing literature on this topic within public management research (e.g. Bellé 2014; Bellé and Cantarelli 2019; Grant 2008a,b; Freeney and Felenz 2013; Steijn and van der Voet 2019; Taylor 2014; Vogel and Willems 2020). They confirm the complexity of prosocial impact as a relational mechanism (Perry 2021). We found that when workers experienced lower prosocial impact, ability-job fit had a stronger impact on meaningful work. This suggests that when civil servants have fewer opportunities for prosocial impact, or perhaps do not recognise such an impact, ability-job fit becomes even more important for experiencing meaningful work. When prosocial impact is high, the needs of ‘the other’, in this case citizens, may crowd out the needs

of ‘the self’, with fulfilment of the needs of others being the dominant contributor to the experience of meaningful work. In contrast, civil servants who experience a high degree of prosocial impact are less reliant on ability-job fit to experience meaningful work. This finding provides some insights into how a balance between the needs of the self or multiple selves and those of the other can be achieved in the realization of meaningful work (Bailey et al. 2019).

Taken together, these findings with regard to meaningful work and prosocial impact indicate that meaningful work may not always depend on levels of prosocial impact but may depend on the extent to which individuals’ own needs are catered for within the organization, particularly if the needs of beneficiaries are demanding or conflicting or where individuals are very removed from tangible beneficiary impact. Where civil servants experience ability-job misfit, because they are either under or over stretched at work, they may struggle to experience meaningful work and this struggle will be further exacerbated when prosocial impact is also perceived as low. Finally, our findings indicate the need to take account of context in order to provide a more nuanced understanding of work engagement in the public service. Context is only rarely considered in engagement research (Bakker et al. 2011; Fletcher et al. 2020; Jenkins and Delbridge 2013) and while we did not measure the impact of the relatively-closed HR system in the Irish civil service directly, we were able to contextualise our analysis of individuals’ perceptions of the extent to which ability-job fit affected their levels of work engagement. In so doing we were able to identify factors influencing engagement as well as providing insights into the way in which engagement is experienced and unfolds in a specific civil service context (Fletcher et al. 2020). Our findings add to prior work on open and closed civil service systems (Suzuki and Hur 2020; 2021), supporting the view that the differences between these systems are important to understanding employee attitudes.

## **Limitations and Future Research**

Despite these contributions, our study has limitations. First, although we were able to draw on a substantial dataset, the data are cross-sectional and from a single source. This presents the possibility that our data are at risk to common method bias, although our analysis suggests that this is not a major cause for concern. Furthermore, as the variables of interest in our study are largely subjective (e.g., perceptions of abilities relative to demands), we do not believe that they can be assessed more objectively or by other parties. The cross-sectional research design limits the extent to which we can draw causal inferences and so we recommend that future research adopt longitudinal research designs. For example, while fit theory suggests that person-job fit leads to work engagement (e.g. Edwards 1991), we cannot preclude the possibility based on other studies (e.g. Lu et al. 2014) that higher work engagement leads to better job fit. Notwithstanding, our research model and findings are broadly consistent with theorizing on engagement and with findings from prior studies utilizing longitudinal designs. A further limitation of our research design is that it is limited to the civil service in Ireland and so our findings may not be generalizable. It would therefore be useful to replicate our study in other civil service contexts internationally. There may also be other relevant constructs that were not captured in our research that may impact on perceived meaningfulness of work (e.g. opportunities to engage in job crafting in a public sector context) that could be explored more fully. Finally, our measure of meaningful work presents an individualist (self-interested) rather than a collectivist (others-interested) perspective with regard to how meaning is derived from work i.e., it captures personal significance but not self-actualization or broader purpose (Martela and Pessi 2018; Pederson 2014). Future research should consider how these individualist and collectivist perspectives can be incorporated into conceptions of meaningful work. This could help to reconcile our findings with regard to prosocial impact and the interplay between self and other dimensions in understanding meaningful work.

## **Implications for Practice**

There are several practice implications of our study for both managers and researchers. First, the findings indicate a link between ability-job fit and both meaningful work and engagement. This points to the need to ensure that civil services that operate closed systems where career planning is based on grades, rather than jobs, take account of the need to find a fit between individuals' abilities and the jobs to which they are assigned. In addition, it is also important to ensure that opportunities are provided for the career planning and development which will allow individuals to progress in areas which make full use of their abilities (Peretz 2020). Civil services have traditionally provided access to good opportunities for education, training and development that may enhance individuals' fit with roles over the time span of their career. In times of economic austerity or, most recently, in the context of a pandemic, career opportunities may be curtailed and individuals left to stagnate in jobs where there is little ability-job fit and few opportunities for the training and development necessary to enable career progression. Such a situation has the potential to create frustration, demotivation and discontent among individuals. However, the introduction and diffusion of competency-based selection and promotion systems has the potential to increase the match between individuals' abilities and their roles and thereby enhance work engagement.

Second, the findings show that higher levels of prosocial impact always foster stronger meaningful work for civil servants. While designing jobs to be high in task significance will enable individuals to understand the ways in which their jobs impact on others, at the same time the type and extent of contact that individuals may have with others must also be considered in job design. It is important that jobs are designed to take account where and how opportunities for prosocial impact might be integrated more evenly across civil service roles. This would address what Perry (2021) suggests is the difficulty in establishing a line of sight between the work of public employees and the success of their organizations. However, the

finding that ability-job fit is more important for perceptions of meaning when prosocial impact is lower is also critically important for the ways in which jobs are designed in the civil service. Roles differ in the extent to which beneficiary contact can be realised and the extent to which prosocial impact is tangible. Understanding that meaning in work and, in turn, engagement can still be nurtured through ability-job fit is critical, particularly for roles that are remote from the front line. As noted above, maximising ability-job fit through the optimal deployment of staff to roles that facilitate the use of their skills and expertise will facilitate meaningfulness and work engagement.

Finally, our study responded to the call for those researching engagement to connect better with the practice of ‘doing engagement’ (Bailey 2022). Many large-scale studies of engagement in the public sector have relied on consultancy firms which often utilize idiosyncratic measures that do not enable comparisons with the broader academic literature. In assisting the Irish civil service with the design of their survey instrument in order to align the survey questions with existing theoretical frameworks, we were able to narrow the academic-practice divide (Fletcher et al. 2020) and ensure that our recommendations are evidence-based and grounded in sound theoretical framing.



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## **Appendix 1**

### **Work engagement (Schaufeli et al. 2006)**

1. I am enthusiastic about my job
2. At my work I always persevere, even when things do not go well
3. At my work, I feel full of energy
4. My job inspires me
5. When I get up in the morning, I feel like going to work
6. I am proud of the work that I do

### **Ability-job fit (Abdel-Halim 1981)**

1. I feel that my work utilises my full abilities
2. I feel competent and fully able to handle my job
3. I feel that my job and I are well matched
4. My job gives me a chance to do the things I feel I do best
5. I feel I have had adequate preparation for the job I now hold

### **Meaningful work (Spreitzer 1995)**

1. The work I do is very important to me
2. My job activities are personally meaningful to me
3. The work I do is meaningful to me

### **Prosocial Impact (Grant 2008c)**

1. I feel that my work makes a positive difference in citizens' lives
2. I am very aware of the ways in which my work is benefiting citizens
3. I am very conscious of the positive impact that my work has on citizens

**Table 1.** Fit Statistics from measurement model comparison

| Models   | $\chi^2$ (df)  | CFI | NFI | TLI | RMSEA | SRMR | $\chi^2_{diff}$ | $df_{diff}$ | <i>p</i> |
|--|----------------|-----|-----|-----|-------|------|-----------------|-------------|----------|
| Full measurement model                             | 7250.24 (113)  | .96 | .96 | .95 | .07   | .05  | ---             | ---         | ***      |
| Model A <sup>a</sup>                               | 21278.29 (116) | .88 | .88 | .86 | .12   | .07  | 14028.05        | 3           | ***      |
| Model B <sup>b</sup>                               | 21086.3 (116)  | .88 | .88 | .86 | .12   | .07  | 13836.06        | 3           | ***      |
| Model C <sup>c</sup>                               | 39257.10 (116) | .78 | .78 | .74 | .16   | .08  | 32006.86        | 3           | ***      |
| Model D <sup>d</sup>                               | 41229.77 (116) | .77 | .77 | .73 | .16   | .09  | 33979.53        | 3           | ***      |
| Model E <sup>e</sup>                               | 54869.43 (118) | .70 | .69 | .65 | .19   | .09  | 47619.19        | 5           | ***      |
| Model F <sup>f</sup>                               | 52460.83 (118) | .71 | .71 | .66 | .18   | .10  | 45210.59        | 5           | ***      |
| Model G <sup>g</sup> (Harman's Single Factor Test) | 66415.08 (119) | .63 | .63 | .58 | .21   | .10  | 59164.84        | 6           | ***      |

Notes: N= 13238 (listwise); \*\*\*  $p < .001$ ;  $\chi^2$  = chi-square discrepancy; df = degrees of freedom; CFI = comparative fit index;

NFI = normed fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual;  $\chi^2_{diff}$  = difference in chi-square,  $df_{diff}$  = difference in degrees of freedom. In all measurement models, error terms were free to covary to improve fit and help reduce bias in the estimated parameter values. All models are compared to the full measurement model.

<sup>a</sup> Job-ability fit, and work engagement combined into a single factor.

<sup>b</sup> Job-ability fit, and meaningful work combined into a single factor.

<sup>c</sup> Meaningful work and prosocial impact combined into a single factor.

<sup>d</sup> Prosocial impact and work engagement combined into a single factor.

<sup>e</sup> Meaningful work, prosocial impact and work engagement combined into a single factor.

<sup>f</sup> Job-ability fit, Meaningful work, and prosocial impact combined into a single factor.

<sup>g</sup> All factors combined into a single factor.

**Table 2.** Heterotrait-Monotrait ratio of correlations (HTMT)

|                     | 1   | 2   | 3   | 4 |
|---------------------|-----|-----|-----|---|
| 1. Ability-Job fit  |     |     |     |   |
| 2. Work engagement  | .69 |     |     |   |
| 3. Meaningful work  | .69 | .75 |     |   |
| 4. Prosocial impact | .48 | .52 | .57 |   |

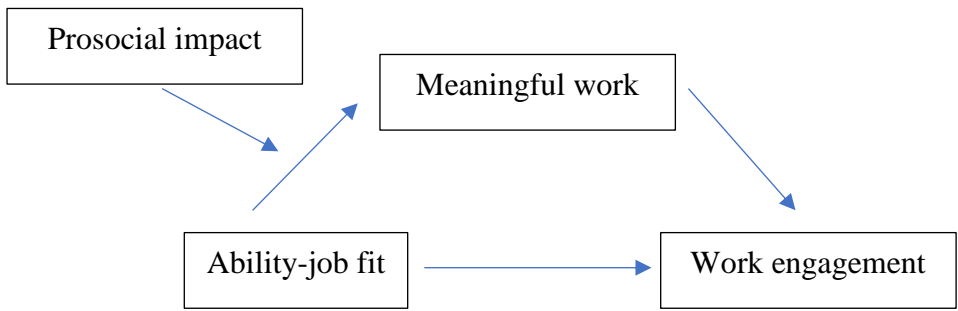
**Table 3.** Means, standard deviations, intercorrelations and internal reliabilities among variables

|                                 | Mean | SD   | 1       | 2      | 3      | 4      | 5       | 6       | 7      |
|---------------------------------|------|------|---------|--------|--------|--------|---------|---------|--------|
| 1 Work Engagement               | 5.35 | 1.11 | (.90)   |        |        |        |         |         |        |
| 2 Ability-job fit               | 3.55 | .77  | .592**  | (.81)  |        |        |         |         |        |
| 3 Meaningful Work               | 3.68 | .92  | .702**  | .599** | (.94)  |        |         |         |        |
| 4 Prosocial Impact              | 3.82 | .92  | .372**  | .242** | .425** | (.95)  |         |         |        |
| 5 Gender (0 = male, 1 = female) | .58  | .49  | .046**  | .012   | .001   | -.005  |         |         |        |
| 6 Tenure (low to high)          | 4.78 | 2.31 | -.026** | .097** | .052** | .011   | .010    |         |        |
| 7 Education (low to high)       | 2.42 | 1.09 | .077**  | .010   | .098** | .051** | -.141** | -.359** |        |
| 8 Grade (low to high)           | 2.64 | 1.62 | .132**  | .190** | .215** | .087** | -.205** | .191**  | .462** |

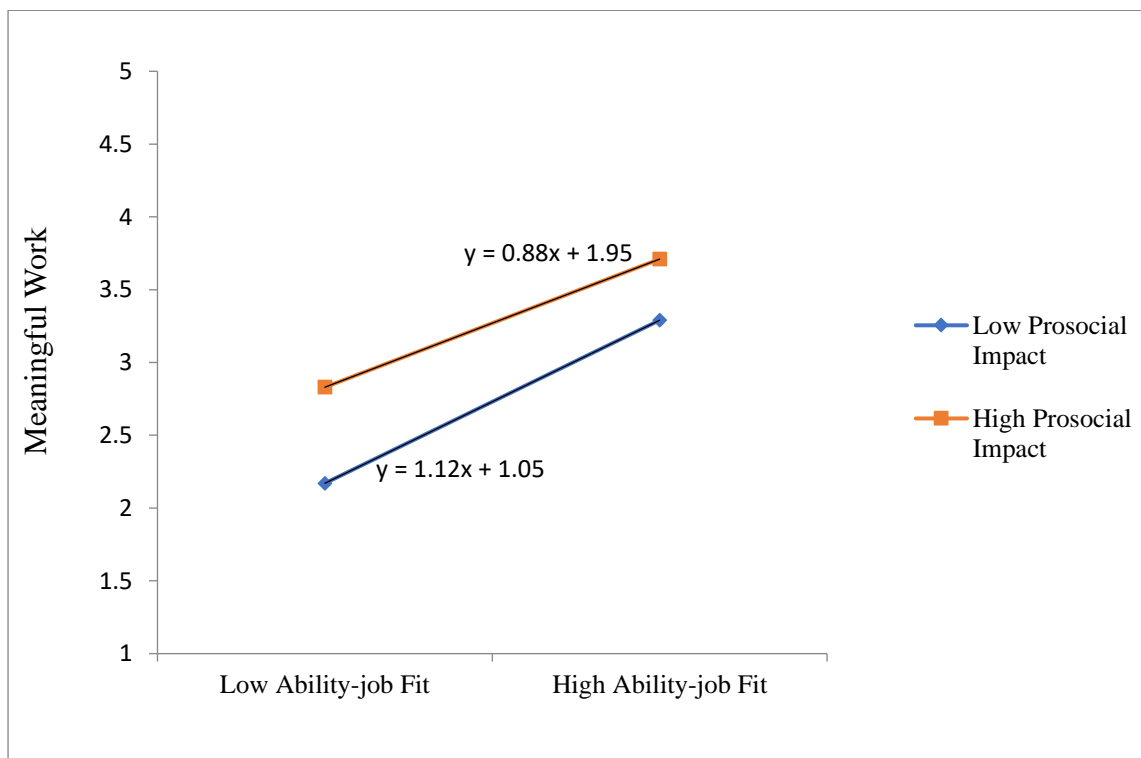
Notes: N=13238 (Listwise). Internal consistency reliability analysis through Cronbach's alpha are reported in parentheses. Mean and SD values for Work Engagement, Ability-job Fit, Meaningful work and Prosocial Impact are unstandardized.

\*\*p < .01 \* p<.05 (two-tailed tests). Internal consistency reliability analysis through Cronbach's alpha are reported in parentheses.

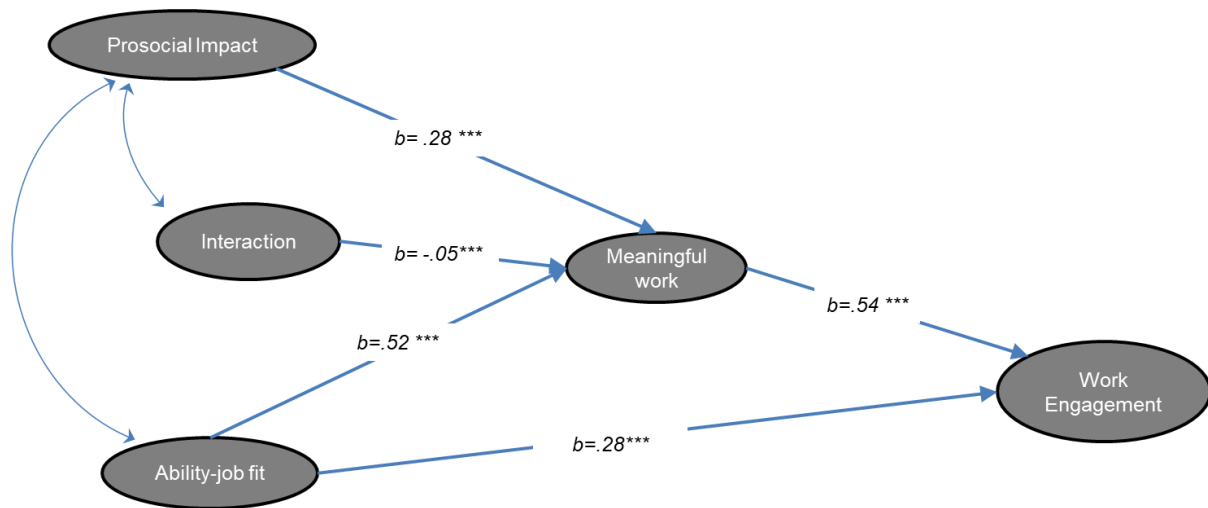




**Figure 1.** Conceptual model



**Figure 2.** Interactions between perceived ability-job fit and prosocial impact on meaningful work



Notes: \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ . The above results are the standardized estimates

| MODEL FIT |        |
|-----------|--------|
| $X^2$     | 474.52 |
| df        | 6      |
| CFI       | .98    |
| TLI       | .91    |
| NFI       | .98    |
| SRMR      | .02    |
| RMSEA     | .077   |

| Controls            | Exogenous Variable: Work Engagement |
|---------------------|-------------------------------------|
| Grade (low to high) | $b = -.02^*$                        |
| Service Length      | $b = -.08^{***}$                    |
| Education           | $b = .01, ns$                       |
| Gender (m=0, f=1)   | $b = .04^{***}$                     |

**Figure 3.** Results of the moderated mediation model